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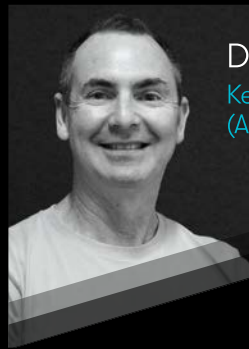
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Manager  
Technical Services Group  
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**SEAN FRAZER**  
Project Manager



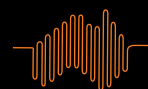
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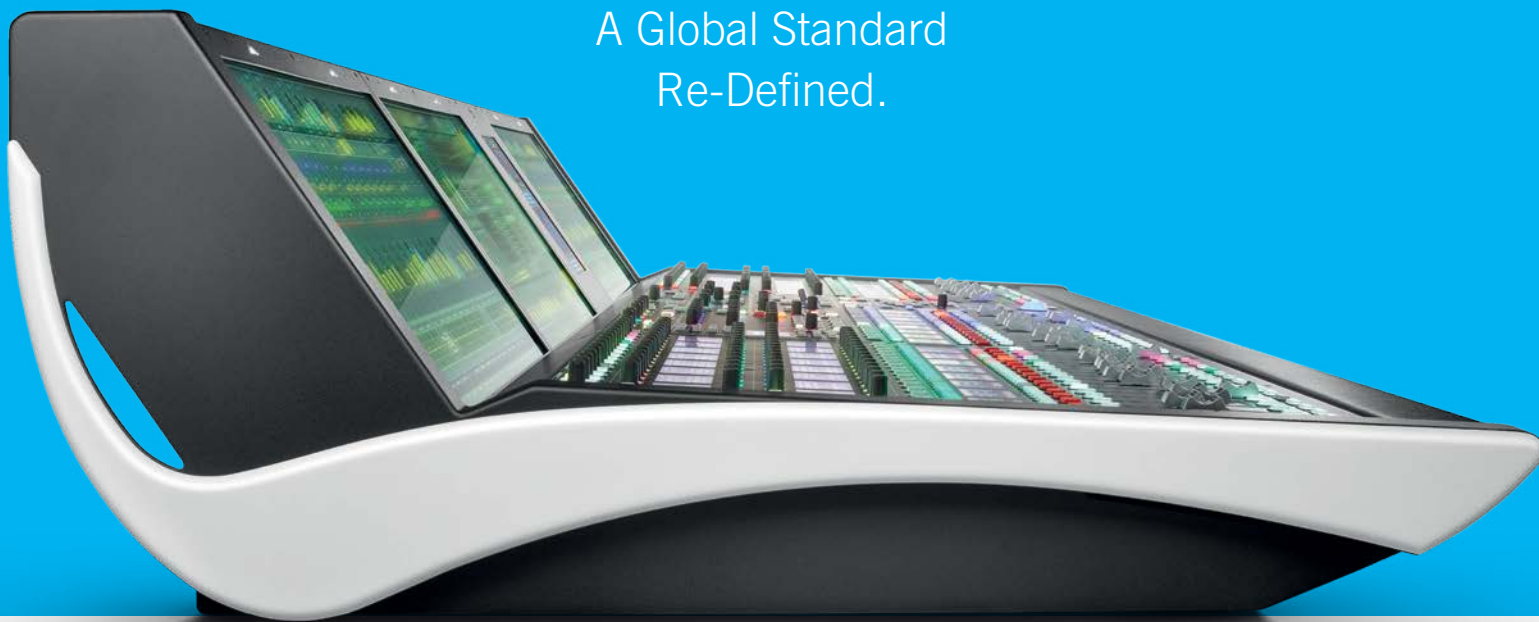
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## Considering the Spectrum of Media...

By Phil Sandberg

**THERE'S CHANGE IN THE AIRWAVES.** Australia's Minister for Communications, Cyber Safety and the Arts, the Hon Paul Fletcher MP, has released a Green Paper setting out proposed reforms to "support the media industry and enhance the range and quality of services and content available to all Australians".

The measures include:

- Offering commercial broadcasters the choice to operate under a new kind of commercial television broadcasting licence, with a reduced financial/regulatory burden provided they agree to move at a future point to using less radiofrequency spectrum;
- Promoting the public interest by using proceeds from freed-up spectrum to invest in Australian news and screen content;
- Introducing an Australian content spend obligation on video-on-demand services; and
- Formalising the role of national broadcasters as key providers of Australian content.

The last two measures are fairly straightforward. The Australian content obligation for VOD services would solidify/accelerate moves many of the current operators have been making, including Netflix, with regard to local content production. However, newer launches and specialist platforms may struggle. It's hard to see Australian content obligations being imposed on Britbox, for example, or a Japanese manga channel. In the case of the ABC and SBS, the Green paper proposes the Government "... legislate to codify the role of the Australian Broadcasting Corporation (ABC) and the Special

Broadcasting Service (SBS) in commissioning and providing new Australian programming".

When it comes to broadcasting licences, the Green paper gives broadcasters the option to continue holding 7MHz multiplex slots under existing licence regulations, or to transition to a new licence with the following conditions:

- The holder of a new licence would no longer be required to pay a tax for the use of spectrum.
- The holder of a new licence would be required to transition to using less radiofrequency spectrum, under a multi-year process to be initiated by Government when certain conditions were met.
- The move to the new licence arrangement would be irreversible.

The scenario envisioned under the new licencing arrangement would be:

- Three 7 MHz multiplexes shared between five broadcasters (the Government would mandate that the ABC and SBS move to a shared multiplex arrangement);
- No commercial broadcasting tax;
- Broadcasters must participate in restack when the Government requires it;
- 55% Australian content quota on main channel; and
- No multichannel content quotas.

In line with jurisdictions such as the United States and Canada, the Government would use the new licencing as a means to free up spectrum in the 600MHz band (currently occupied by

UHF services) with a view to auctioning it off to providers of 5G services.

A portion of the proceeds from these spectrum auctions would then be earmarked to fund local production and public interest news journalism, while funds would also be made available to the ABC, SBS and regional commercial broadcasters for technology upgrades.

The proposed reforms are in addition to those announced as part of the 2020-21 Federal Budget to simplify regulations and inject AUD\$53 million into the development and production of local film and television content.

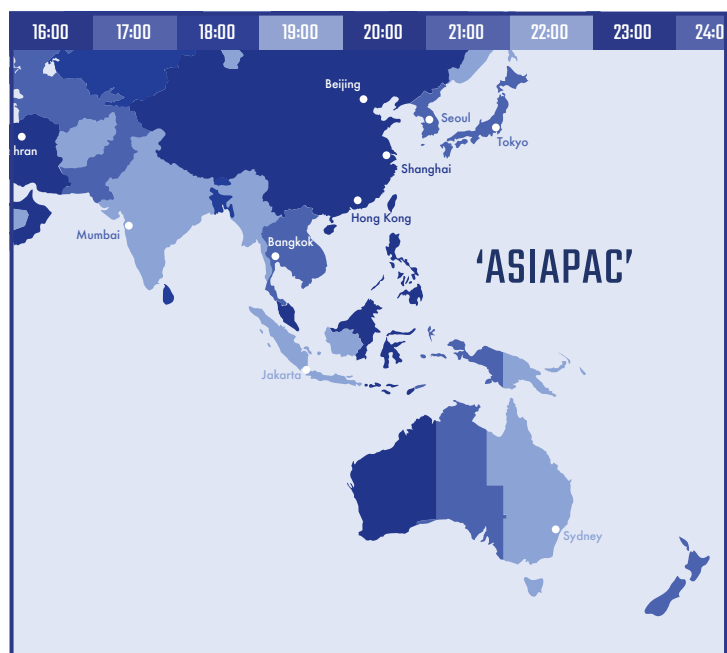
Among the many questions to be answered would be the length of any transition – the Green Paper nominates 2025 as the earliest the changes might be felt by consumers. Then there is appetite for take-up of the new licences, as well as the appetite from telcos to participate in subsequent spectrum auctions. Additionally, what happens to production and news funding arrangements once the auction proceeds are spent?

There is much to mull over. The Government is seeking public submissions on the Green Paper by 7 March 2021.

Visit <https://bit.ly/39uaD9G>

Thanks for reading

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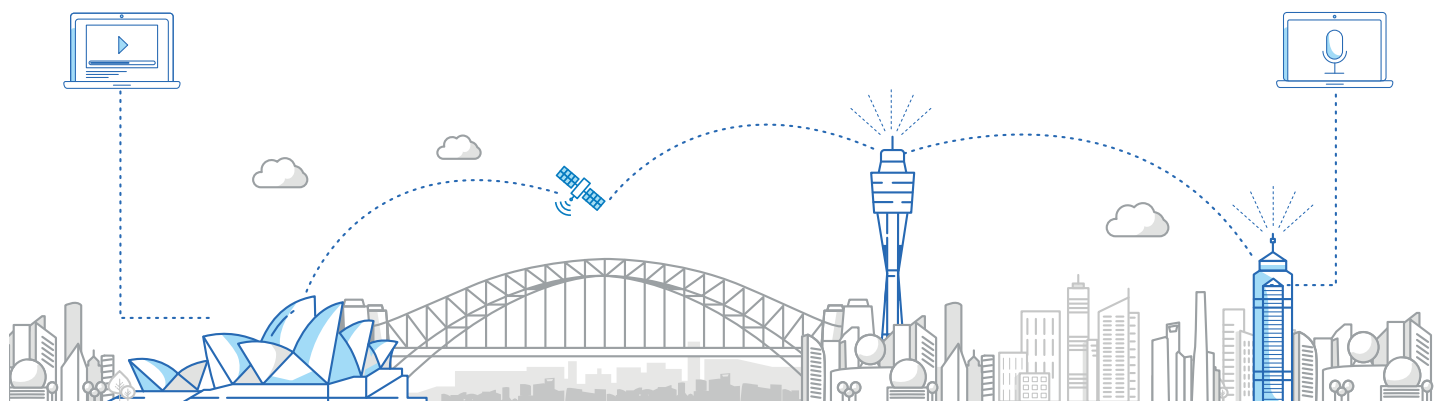
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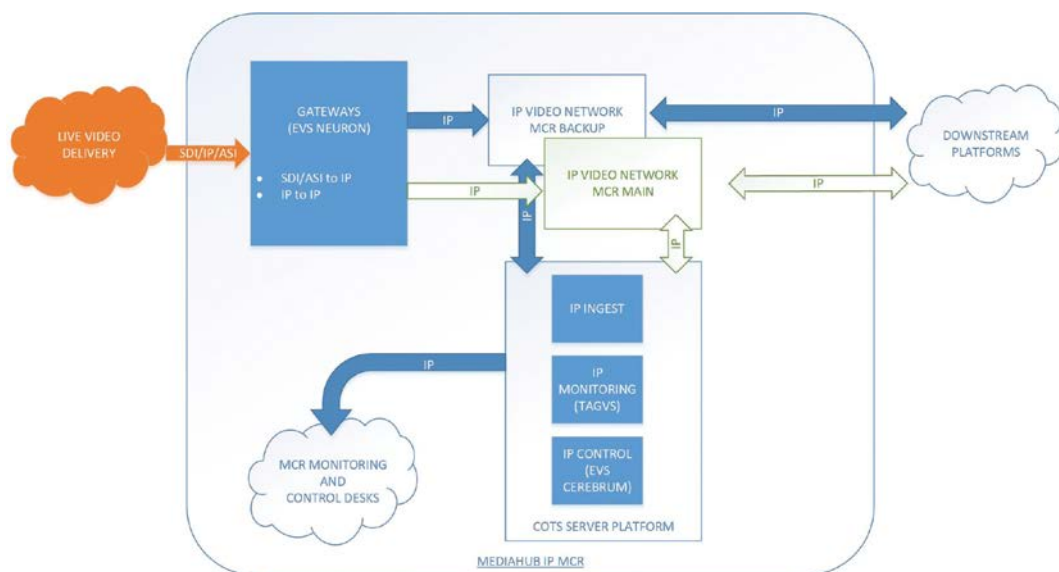
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## MediaHub Opens the Gateway to IP with Magna Systems and EVS

**OVER THE LAST 12 MONTHS**, MediaHub Australia performed an extensive RFP with major broadcast vendors for an internal project to refresh their existing Master Control environment from a traditional SDI based platform to a COTS and SMPTE 2022-6/7 and 2110 IP-based platform. When the RFP was complete, the winning tender was submitted by Magna Systems with the core technology coming from EVS Media Infrastructure Solutions.

As MediaHub's Executive Head of Technology, Simon Scott, explains, "Our key requirements were to have flexible gateways or server devices to convert any incoming signal format from various service providers - who deliver as SDI/ IP/ASI - to a standard IP format SMPTE-2022-6/7 or SMPTE 2110 for our MCR to process. One of the key needs was operational control surfaces to provide the same touch and feel of a traditional SDI routing system, but with the signals being managed in IP workflows. The EVS-based solution proposed by Magna satisfied all of these criteria."

In fact, the gateway devices needed to be very flexible, have a small footprint and include support of advanced video processing such as sync, audio shuffling, legalising, audio processing, picture and up/down convert so signals can be made good on the entry point into the MCR platform without the need for banks of traditional modular processing cards.

Scott continued, "The core MCR system is being built with standard Common off the Shelf or COTS-based IT equipment including network switches and servers and any processing past the conversion gateways is done on standard IT equipment."

The core part of Magna's solution includes EVS Neuron IP gateways, EVS Cerebrum broadcast control systems and TAG multi-viewers.

Scott added, "All of the EVS and TAG devices proposed and supplied by Magna were thoroughly tested in a vendor shootout by MediaHub's engineering team and their technology was by far the leader of the pack in terms of meeting MediaHub's RFP requirements. Specifically, the Neuron gateways shone as boundary devices to convert traditional SDI/ASI feeds to IP standards, or IP to IP bridging with IP multicast translation. They also provide video signal processing under the control of Cerebrum. Cerebrum itself excelled in routing control of both new and legacy systems, hard and soft panels for user controls, rules-based workflows and IP SDN with IP and SDI timeline management. Finally, the

TAG VS multi-viewers give us a low latency mosaic generation of uncompressed and compressed IP feeds as 4K IP outputs for 4K displays in our MCR. The entire system runs in a full COTS environment with standard off the shelf IT servers, on 100G Network links back to the video core. It really is and was the best solution available by far."

The Magna EVS solution will enable new workflows for MediaHub's MCR, including 4K, HDR, and workflows that are in native IP. This in turn allows for a graceful transition between the current operations to the new IP paradigm with boundless expansion capability.

Scott concluded, "Magna and their EVS-based solution have provided MediaHub with dynamic flexibility in processing and monitoring various types of streams from ASI, IP Compressed, SDI, IP uncompressed and various video flavours including HD, SD, 4K, HDR, SDR and audio formats - all the while maintaining MediaHub's high SLA and quality standards. I must also say the entire team at Magna, particularly Paul Maroni and Tim Banner, have been excellent throughout the process with demonstrations, pre-sales advice and design always on-hand."

Magna's group sales and marketing manager Paul Maroni said, "This is a ground-breaking solution for MediaHub, an organisation that continues to push the boundaries of technology in order to enhance its offering to its customers. We are delighted to be such a key part of their next phase of growth along with our technology partners EVS Media Infrastructure Solutions."

EVS Director of Sales UK, Ireland, Africa & Australia for Media Infrastructure, Adrian Richmond added, "This solution very much represents a meeting of minds. MediaHub are a particularly forward-thinking organisation where technology is concerned, Magna are the region's leading technology provider and supporter within the broadcast and telecoms industries and EVS produce best in breed IP solutions particularly in the form of our Neuron IP gateways and EVS Cerebrum broadcast control systems. We are delighted our products form the cornerstones and backbone of such an innovative solution and again thank Magna for being such a critical part of our success in the region."

Magna's EVS-based IP solution for Media Hub Australia is due to be installed and operational in the first quarter of 2021.

Visit [www.magnasys.tv](http://www.magnasys.tv)

## McAusland, Tiwary Appointed to Directors' Guild

### THE AUSTRALIAN DIRECTORS' GUILD

(ADG) has announced Alaric McAusland as its new Executive Director. Alaric, who took over from Diana Burnett, began with the ADG on November 16. The ADG has also announced the appointment of Ana Tiwary to the new role of Strategy & Development Executive.

Alaric was most recently Chief Operating Officer at Grace - A Storytelling Company in Los Angeles and was previously Managing Director at Deluxe Entertainment Services Group and Atlab. Alaric has also served as Chairman of Ausfilm and Council Board Member of Screen Producers Australia.

Ana Tiwary is a director and producer with her own company indVisual films and she serves on the board of WIFT Australia. The Strategy & Development Executive is a new role and Ana will be responsible for deepening engagement with the director community and broadening the Guild's membership base, with an emphasis on diversity, inclusion and regeneration and optimising benefits and professional development opportunities for ADG members.

Visit [www.adg.org.au](http://www.adg.org.au)



## Foxtel Launches Voice Control

**FOXTEL HAS ANNOUNCED** it has commenced a major software update for 1.1 million iQ3 and iQ4 customers, which together with the new Foxtel Voice Remote provides the ability to search, browse and navigate the world's best entertainment all with the touch of a button and the sound of their voice. With smart voice recognition technology, Foxtel customers can simply push the microphone button and speak a command to the Foxtel Voice Remote, enabling them to search for a specific show, sporting team, actor, director, character or even use a famous movie quote from a film.

For example: "Good Will Hunting" will return the movie, while saying a famous movie quote like "may the force be with you" will show Star Wars movies, with over 500 movie quotes currently available.

Combination search commands are also available such as "action movies" and "just the ones with Tom Cruise".

Plus, the Voice Remote understands the local lingo navigating with ease to sporting team nicknames like "Rabbitohs" or "Magpies" and recognising 10 major Australian accents.

Other features include:

Browse specific themes, genres and moods of content. For example, "show me Christmas movies", "show me romantic comedy movies", "show me air crash investigation shows" or "show me home renovation shows" will return a list of content.

Adjust volume, play, pause, rewind, skip ahead, channel change and schedule recordings.

Patrick Delany, Foxtel Group Chief Executive Officer, said: "Foxtel is known for its breadth and depth of content across movies, entertainment, lifestyle, documentaries and sport. We have more than 40,000 individual titles available including full season stacks, and we've had massive increases in titles available on demand.

"It means we have great shows for every family member however with so much choice, finding it for the big screen hasn't always been simple – try typing in a search for the multi-award winning "Chernobyl".

"With the launch of our new user interface last year and now the Voice control, we are continuing to invest in innovation to reimagine people's experience of Foxtel and ensure we provide a premium experience of the best of TV and on-demand, all in one place.

"The Foxtel Voice Remote is only active when the microphone button is pushed, rather than always being in listen mode waiting to be activated by a speech command, ensuring users can feel confident about the privacy within their home."

The update enabling the Voice control is already underway and will be completed during November. Over a quarter of a million Foxtel customers already have the Foxtel Voice Remote, while for customers wanting to purchase the new remote Foxtel has introduced a lower price of AUD\$29.

Visit [www.foxtel.com.au/voice-remote](http://www.foxtel.com.au/voice-remote)

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## Murphy Moves to FUJINON National Sales Manager

**INDUSTRY VETERAN SIMON MURPHY** has been promoted to the role of national sales manager for all FUJINON optical products in Australia. Murphy's remit now includes all FUJINON products from long range surveillance lenses and CCTV lenses through to high-end broadcast and cine lenses. He is also responsible for the sales of the broad range within FUJIFILM's Industrial Products Division.

Murphy has essentially been with FUJIFILM Australia since 2006 where, in amongst other roles, he successfully managed their Recording Media Division for over a decade. In addition to FUJIFILM he has also enjoyed considerable

success with other major international companies including Sony, Panasonic, JVC, AGFA and BASF.

Simon Murphy said, "It's an exciting time to be part of the FUJIFILM Australia team as, despite the obvious challenges in the market, we have some excellent new products including our new UA125x8 and UA107x8.4 products – the marquee offerings in our 4K Plus Premier lens range – and our range of 8K lenses which enable sportscasters to futureproof better than they ever have been able to before. Then



there's the new flagship wide-angle Premista 19-45mm zoom lens – the third model to join the Premista Series of zoom lenses for cinema cameras that support large-format sensors.

"I'm very much looking forward to meeting all FUJIFILM and FUJINON Australia customers again face-to-face as soon as the situation allows it.

In the meantime, anyone who would like to contact me can do so at any time on 0419 770 167 or at [simon.murphy@fujifilm.com](mailto:simon.murphy@fujifilm.com)."

## PEOPLE ON THE MOVE

**DAVID TURNER HAS TAKEN** on the role of Head of Production – TV COR 36 at COR 36 for the 36th America's Cup. Based in Auckland, Turner is a television producer and founder of Perspective Group Ltd. His previous roles include Lead Producer – 2018 Asia Games with the Asia Pacific Broadcasting Union; and Primetime Producer for the 2018 Commonwealth Games with TVNZ.

**ANDREW MCKINNON** has taken on the role of Freelance Director with Gravity Media Australia for coverage of the Women's Big Bash Cricket. A

Director/Producer with 2 Little Fish, McKinnon has managed various webcasts including NSWRL, Hybrid Rugby, Gymnastics and Boxing events.

**NATHAN BROOKES** has been appointed Producer at Sports Entertainment Network (SEN). He was previously with FOX SPORTS Australia in the role of Producer – Fox League, and was formerly a Graphics Producer with Alston Elliot.

**DALE LEVIN** has been appointed SVP, Co-Head of IMG Media Asia-Pacific. His previous roles with the company include SVP, Head of Sales (APAC).

**PAUL MEYER** has moved into the role of Senior Broadcast Projects Engineer with Foxtel. He was previously involved in Product Solution Design with the pay-TV operator.

**RAOUL COSPEN** has been appointed Director of Product Strategy – News with Dalet Digital Media Systems. He was General Manager Asia Pacific with Dalet, based in Singapore.

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## SBS Appoints David Hua Director of Audio and Language Content

**SBS AUSTRALIA HAS ANNOUNCED** the appointment of David Hua as Director of Audio and Language Content (ALC).

Mr Hua joins SBS with more than 20 years' experience in the media industry. He has held a number of senior executive roles at the Australian Broadcasting Corporation (ABC), and has been responsible for diverse portfolios across radio, content, marketing, commercial and digital.

Most recently, Mr Hua led the ABC's international services including ABC Radio Australia, ABC Australia (TV), and digital services that connect audiences around the world with Australian stories.

SBS Managing Director, James Taylor said, "David is an accomplished leader with many years of experience across the radio, broadcast, and digital sectors. His keen passion



for content and understanding of the industry will be key to the continued growth of our ALC offering. I'm delighted to welcome David to SBS's Executive team."

On his appointment, Mr Hua said, "It is a great privilege to be able to continue my career in Australia's national broadcasting and media services by joining the SBS family. How people relate to each other has always been the key to a healthy society. The role SBS plays in telling the stories of Australians in all of our diversity is only growing more important, as we work to strengthen our vibrant, inclusive democracy."

Mr Hua commences as SBS Director of Audio and Language Content in early December.

Visit [www.sbs.com.au](http://www.sbs.com.au)

## MediaWorks NZ Appoints Cam Wallace as CEO

**THE BOARD OF DIRECTORS** of New Zealand's MediaWorks have announced the appointment of Cam Wallace as the media company's next Chief Executive Officer.

Wallace was previously Chief Commercial and Customer Officer at Air New Zealand where he was responsible for driving profitable growth across the airline as well as delivering new market opportunities and growing strategic alliance partnerships. In the role he led a diverse portfolio including Commercial, Cargo, Marketing, Sales, Communications, Loyalty, Alliance and Customer Experience to name a few, with teams located in New Zealand and around the world.

MediaWorks Chairman, Jack Matthews, says Wallace will bring the experience and fresh perspective required as the business focuses on growing its radio and outdoor platforms.

"The MediaWorks business is entering an exciting new phase," said Matthews. "We are in a strong position to realise the combined

power of our market leading radio and outdoor platforms and to focus on implementing key strategic initiatives to deliver long-term growth. We believe that Cam is the perfect fit for driving this agenda over the coming years with his proven record in delivering strong commercial performance and leading his people to best-in-class results."

"While it's a change in industry for me, the overarching objectives are the same and I look forward to exploring and capitalising on the growth opportunities across radio and outdoor over the coming years," said Wallace. "The most important component of any business is its culture and I'm passionate about driving an engaged and motivated workforce with a common purpose, I can't wait to meet the team and get started."

Cam Wallace will take up the position of Chief Executive Officer in the New Year.

Visit [www.mediaworks.co.nz](http://www.mediaworks.co.nz)

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## Matt James Appointed MD of Nine Melbourne

### SENIOR GLOBAL MEDIA

**AGENCY** executive Matt James is returning to Nine as Managing Director – Nine Melbourne. James has recently returned from London where he was global CEO of leading media agency network Zenith Media. Before that he held senior media roles as Australian CEO of Publicis Media and CEO of Zenith Australia.

He will oversee Nine's second largest market, which includes Channel 9 in Melbourne, 3AW, The Age and the Melbourne bureau of The Australian Financial Review. Melbourne is also the home of many of Nine's key TV productions, including The Block, LEGO Masters and Millionaire Hot Seat.

James will report to Lizzie Young, Nine's Managing Director – Local Markets & Group Marketing.

"Melbourne is one of our key opportunities and Matt's experience in driving growth for brands will be incredibly important as we consolidate the Nine Melbourne proposition locally and build on our offering for



consumers and clients with the greatest brands in the market," Young said.

"Having someone of Matt's calibre – with his broad experience on both the media owner and agency side – is a strong addition to our state-based leadership team."

The Melbourne appointment is a return to Nine for James, who left the group in 2015 to move agency-side to Publicis after holding senior roles including Group Director of Nine's client solutions division, Powered, and Managing Director of its Digital Media division.

"I am absolutely thrilled to be returning to the Nine family and privileged to be joining what I know is a very passionate, dedicated and dynamic team in Victoria," he said. "Nine continues to be the most progressive, expansive and transformative media company in Australia and I'm excited at the opportunity to be part of its continuing success for 2021 and beyond."

Visit <https://nineforbrands.com.au>

## ViacomCBS Names Jarrod Villani ANZ Co-Lead

### VIACOMCBS NETWORKS

**INTERNATIONAL (VCNI)** has announced that Jarrod Villani will join Beverley McGarvey, Chief Content Officer and Executive Vice President, as co-lead of ViacomCBS Australia and New Zealand.

As Chief Operating and Commercial Officer and co-lead with McGarvey, Villani will be responsible for all the combined company's commercial activities and operations in both markets.

Most recently, Villani was Queensland's Head of Restructuring and Brisbane's Head of Office at advisory and investment firm KordaMentha.

McGarvey, who was promoted to the new role of Chief Content Officer and Executive Vice President in March this year, led the integration and transformation of ViacomCBS Australia and New Zealand. She is responsible for all content and creative activities related to the

company's networks and digital properties in Australia and New Zealand.

McGarvey said: "I am thrilled Jarrod is joining our team and I look forward to working closely with him alongside the existing Executive Leadership Team and the international leadership team as we take ViacomCBS Australia and New Zealand into 2021.

"Next year we will launch premium SVOD service Paramount + whilst growing our existing linear and subscription broadcast and digital assets. Jarrod has worked closely with the team throughout this year and on a project basis in the past and we are thrilled to have him join us on a permanent basis."

Villani will take up his new role in early 2021. Both McGarvey and Villani report to Maria Kyriacou, President of VCNI's operations in Australia, Israel and the UK.

Visit [www.viacomcbsanz.com](http://www.viacomcbsanz.com)

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## Cooke Names Hon Ming Lai MEA/APAC Sales Director

### COOKE OPTICS HAS APPOINTED

Hon Ming Lai to the role of Director of Sales (Asia, Australasia, Africa, Middle-East), effective immediately. Reporting to Thomas Greiser, Director of Global Sales, Hon Ming will be based in Hong Kong. Hon Ming joins Cooke from Shiro (H.K) Ltd where he spent seven years as Business Manager leading a sales and marketing team focused on high-end cine and video equipment including Zeiss, RED, Atomos, Tiffen and Kinoflo. Prior to that he held increasingly senior regional sales and business development roles with Kodak over 19 years, culminating in a 10-year stretch as Country Business Manager. Hon Ming holds an MBA from Hong Kong University of Science and Technology.



"Hon Ming has a proven track record in sales and business management across the region, with good technical knowledge and key market intelligence," said Thomas Greiser, Director of Global Sales, Cooke Optics. "He will be a great asset to the Cooke sales team as we continue to expand our footprint in the rapidly growing APAC and MEA regions."

Hon Ming Lai said, "I'm excited to join one of the oldest and most revered companies in the industry, and am looking forward to making Cooke's exceptional lenses more accessible for film and television production across the region."

Visit [www.cookeoptics.com](http://www.cookeoptics.com)

## Fu Appointed VP APAC Sales for TVU

### LIMING FU HAS BEEN APPOINTED

Vice President of Sales (APAC) for TVU Networks, the developer of cloud and IP-based live video solutions.

Fu comes to the role from EVS/Axon Digital Design VP where he was head of APAC Regional

Operations. He has also held roles with Grass Valley, Thomson Broadcast and Philips. He is also an APAC Council Member with industry body the IABM which he helped introduce and promote throughout the region.

Visit <https://www.tvunetworks.com>

## Parimal Pandya MD for Akamai APAC & Japan

AKAMAI TECHNOLOGIES, INC. has announced that Parimal Pandya has been named the Managing Director, Asia Pacific & Japan (APJ), in addition to his current role as Vice President of Media and Carrier Sales, Asia Pacific & Japan. Pandya assumes his new role from departing Managing Director, Graeme Beardsell. Pandya began his career at Akamai in 2003 as a product manager at the company's Cambridge office in the US, where he was instrumental in the launch of Akamai's Web Performance product line. Bringing a global mindset to the rapidly expanding APJ marketplace, he moved

to Bangalore, India in 2009 where he led the expansion of the company's India operations and global mid-market go-to-market teams. Pandya expanded his focus to Akamai's business in APJ by setting up the company's carrier strategy group and delivered key strategic partnerships with major telecom operators across the region paving the way for future growth and expansion. He then moved on to his current role to lead Akamai's Media and Carrier business for APJ. He is based in Hong Kong.

Visit [www.akamai.com](http://www.akamai.com)

## Vale Eric Hitchen

### THE AUSTRALIAN BROADCAST INDUSTRY

is mourning the loss of pioneering technologist Eric Hitchen who recently passed away at the age of 93 following a long illness.

Eric's life was one of technology, travel and most of all opportunity. After working as a radar technician with the Royal Navy in WWII, he joined the Marconi Wireless Telegraph Company in 1951 and was soon after engaged teaching a television course at the Marconi College.

After moving to Australia, he worked on the broadcast of the Melbourne Olympic Games (1956), was Engineer in Charge of Channel Ten's broadcast of the Olympic Games in Los



Angeles (1984) and Seoul (1988) and contributed to the winning bid for the Sydney Olympic Games (2000).

He was awarded a Prince Philip Prize for Australian Design for his work on the construction of the Sydney Opera House, and the Paul Marlan Award for his contribution to television engineering in Australia.

Eric was loving father of Judy and Tim, grandfather of Oliver and Ben, beloved husband of Joan Patrick, partner of Judy Dwyer, and father-in-law of Susan Dearn.

Those interested can find Eric's biography at <https://bit.ly/3qedHNe>

# MAGNA

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## LED-Stage Virtual Production Lands in Adelaide

**SPURRED BY THE SUCCESS** of productions like the *Mandalorian* and the necessity of COVID-safe restrictions, interest in LED-stage virtual production workflows is on the rise.

Following the launch of the WETA Digital/Avalon Studios/Streamliner Productions LED-stage virtual production service in Wellington, New Zealand, the South Australian Film Corporation, events company Novatech, VFX house Rising Sun Pictures (RSP), and technology provider Intraware recently showcased the technology and know-how to the Adelaide Production Industry. Over three days the event attracted major producers, directors, DOPs and VFX professionals who are ready to embrace this new frontier in film making.

Hosted at SAFC's Adelaide Studios, RSP supplied real-time content for the virtual set in Epic's Unreal Engine, while Novatech provided the Virtual Production hardware, including a purpose-built 12m x 3.6m, curved LED-wall and interactive set lighting. Intraware provided disguise servers and Mo-Sys camera tracking software. The showcase included an actor performing on set in front of a digital projection of a 3D scene on the state-of-the-art LED screen, captured with integrated camera movement and interactive lighting.

RSP's Noah Vice served as Virtual Production Supervisor on the project; Art Director Nick Pill provided key concept direction for the team preparing the digital backgrounds.

"Rising Sun Pictures is proud to have been a part of demonstrating the possibilities of Virtual Production to film-makers in South Australia. As a leader in Visual Effects production, Virtual Production allows us to use our design and world building skills to help film-makers realise their vision earlier in the production process, capturing finished effects shots in the camera," said Rising

Sun Pictures Managing Director, Tony Clark.

Novatech's Managing Director, Leko Novakovic remarked, "We pride ourselves on using cutting edge technology to deliver world-class services. Novatech are thrilled to be able to bring this world-leading technology to South Australia and have demonstrated this innovation in virtual production technology to the local industry. Having this technology available from local suppliers here in Adelaide will help in attracting international film, television and business to our great state."

Novatech has virtual production technology is available for hire, including LED screens and projection solutions in a variety of size & configurations, disguise xR servers, and Mo-Sys camera tracking equipment, which go hand-in-hand with clients' cameras, real time 3D engines (such as Unreal), and other associated production equipment and crew.

"It's about doing as much as you can in camera," adds Intraware Director Wayne Morphew. "Now, whether that's in a broadcast studio or whether that's on a film set, it's about getting rid of green screen, number one, and getting a real reflection, and so on.

"It's 'going back to the future'. We used to do everything on set. When digital come along, the technology broke all that, so now we've got this massive post pipeline. By bringing it all back, a lot of post will become pre-post and the bulk of



it can get done on set, so then you're just doing some editing afterwards, or some more heavy effects. There's a lot of cost savings if you can get it done on the shoot day.

"Also, you don't get all the bleed you get with green screen. The actors all present, are acting in context because they can see the environment around them. They're not trying to imagine it and it's great for positional, for being in the right position, but also for timing. If something's got to be timed, then the actor or the presenter can see what's unfolding around them and react to it. You get all the proper light and reflections, which is expensive to do afterwards in post. And the other thing, especially for shorter productions, like in broadcast or TVC, one second you could be on the snow and then with a flick of the switch you can be in a desert. To do that when you're building real sets, that will take weeks to transform."

Visit [www.rsp.com.au](http://www.rsp.com.au) <https://www.ncet.co>

## Fujinon Cabrio Puts Blackmagic 12K to the Test

**FOLLOWING THE RELEASE** of the URSA Mini Pro 12K, Fujinon has been putting the new Blackmagic Design camera through its paces with the Cabrio XK20-120mm T3.5 zoom lens

The XK6x20 is a zoom lens designed for cinema cameras that offers optical performance compatible with 4K cameras and covers a wide range of focal length from 20mm to 120mm. It also realises T3.5 brightness in the entire zoom range.

"With this new camera, we've gone and tested our existing product to see how viable it is," says Marc Catrall, Market Development Manager for FUJINON Cine Products (UK).

"We firstly did some coverage tests and some resolution tests. So, the resolution tests were

absolutely fine. That 12K sensor, the lens is more than able to resolve that resolution. If you are specifically using it for the 12K, the 20-120 will be fine for that.

"Quite important is the price point. We don't like to talk about price but, realistically, it's a sub-USD\$10,000 camera with a sub-\$10,000 lens, so we really hope that people who are considering this camera also consider looking at this lens.

"In terms of the image coverage, the image circle is 28.5mm. It is also slightly larger in terms of the illumination circle. In all of our tests, we found that there was some slight vignetting on the full sensor – DCI 17x9 – but only at certain focal lengths and certain T-stops. Obviously, we would always recommend that you test that



corner illumination – it might be a look that you're after – but it's just that we want people to be aware that we wouldn't guarantee that it covers in the 17x9 mode, just because of the corners."

Visit [www.fujifilm.com.au](http://www.fujifilm.com.au)

# SONY

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[www.](http://www.pro.sony)

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## Komodo 6K from Red Digital Cinema

RED DIGITAL CINEMA'S new KOMODO 6K camera system includes a global shutter sensor (27.03mm x 14.26mm) that maintains RED's high standard of image quality and dynamic range. The camera is packaged in a small 4-cubic-inch (101.6 mm) form factor and weighs only 2.1 pounds (0.95 kgs).

KOMODO captures 6K at 40 fps, 6K WS at 50 fps, and 4K at 60 fps. Highlights of the camera include an RF mount for users to leverage adaptors for EF, PL and other lens systems, including anamorphic lenses, for maximum creative flexibility; a phase-detect based autofocus control on the integrated, color LED touchscreen display that simplifies monitoring and menu navigation; and new streamlined REDCODE® RAW settings (HQ, MQ, and LQ compression options) enhancing the user experience for various shooting needs. Additional features include compatibility with CFAST 2.0 recording media, 4K SDI output, built-in wireless capabilities, and connectivity via the all new RED Control app, which is available now for iOS devices and coming soon on Android.

Additionally, a community of partners has worked with RED to bring KOMODO and KOMODO accessories to market, including

Angelbird, CoreSWX, Fool Control, Gates Housing, KipperTie, SmallHD, and Wooden Camera, among others. Adobe, DaVinci Resolve, Final Cut, Assimilate, Autodesk, Avid, and Colorfront all offer post-production support for KOMODO via RED's latest SDK.

The KOMODO 6K includes:

- KOMODO 6K camera brain
- AC power adaptor 45W
- 1x RF to EF mechanical lens adapter
- Mini world travel adaptor kit

RED is also launching two pre-bundled pack options:

- KOMODO Starter Pack - This pre-bundled setup is perfect for content creators and run and gun operators. Including KOMODO 6K with the Wing Grip and RF to EF adapter with ND filter. Also included is media and media reader, as well as a PTap-to-power cable and timecode cable.
- KOMODO Production Pack - This includes everything from the Starter Pack plus additional production-level accessories including the Expander Module and Outtrigger Handle.



Several accessories are also available from RED to customize the KOMODO, including the Outtrigger Handle, an Expander Module, a Wing Grip, Link Adaptor, RED CFAST 2.0 Card Reader, and RED PRO CFAST 512GB, among other ancillary components.

Visit <https://www.red.com/komodo>

## ARRI EF Mount (LBUS) for Large-format and Super 35 Cameras

ARRI HAS ANNOUNCED its new EF Mount (LBUS), allowing EF mount lenses to be used on ALEXA Mini LF, ALEXA Mini, and AMIRA.

In order to extend the benefits of using EF mount lenses to large-format motion picture productions, ARRI has redesigned its EF mount with a wider light baffle and LBUS connector, allowing it to cover the large-format sensor of the ALEXA Mini LF, as well as the Super 35 sensors of the ALEXA Mini and AMIRA. The new EF Mount (LBUS) allows the ALEXA Mini LF, ALEXA Mini, or AMIRA to accept lenses with an EF mount. On the Mini LF and Mini it also provides an LBUS connector, which is not supported on the AMIRA. The previous ARRI Lens Mount will remain available for the AMIRA.

The use of cine-style EF mount lenses on motion picture cameras has been a popular way to make more affordable optics available to budget-conscious productions. Their mechanical design allows the use of external lens motors connected to the mount's LBUS connector. Precise remote control is accomplished through ARRI ECS hand units like the wireless WCU-4 and SXU-1 and the wired Operator Control Unit OCU-1 and Master Grips.

Additionally, the new mount allows filmmakers to utilize the wide variety of still photo EF mount lenses for insert shots, including vintage lenses, extreme wide-angle lenses, fisheye lenses, tilt-shift lenses, extreme telephoto lenses, macro lenses, and other specialist EF mount lenses. The new mount allows setting of the lens' internal iris motor and even powers the image stabilization built into some telephoto EF mount lenses.

Visit <https://www.arri.com/lens-mounts-and-adapters>

## Sachtler Gets Aktiv with New Fluid Head

SACHTLER, THE MANUFACTURER of camera support systems and accessories for broadcast and cinematography, has announced the launch of a new fluid head product range. From the design team that created flowtech, the aktiv fluid head - with SpeedLevel and SpeedSwap technology - allows camera operators to mount, level and lock the head in seconds and to switch quickly from tripod, slider or hand-held shots in an instant to capture the widest range of shots in the shortest time.

According to James Guest, engineering manager - Vitec Production Solutions, "We worked closely with camera operators around the world to understand their needs to develop 'flowtech' a tripod that makes camera set-up faster and more flexible. Now with aktiv, we have made fast even faster. Studying camera operator movement, we removed any elements that slow them down while adding more flexibility and control as well as more levels of drag and counterbalance than ever, giving operators more time and opportunities to push their creativity."

Available in four models, aktiv is the latest addition to the award-winning Sachtler camera support range. aktiv6 and aktiv8 are compatible with all main Sachtler 75mm tripods - with aktiv8 available in 'side load' or 'touch and go' camera plate options - while aktiv10 is a 100mm bowl head with side load camera plate. aktiv supports payloads from 0kg up to 12kg (8kg for aktiv6) making it the ideal system for fast-paced electronic newsgathering (ENG), and a wide range of wildlife, commercial, and documentary productions.

aktiv fluid heads feature SpeedLevel technology - which replaces time-consuming bowl clamps - allowing operators to release, level, and lock their head tightly into the perfect position by simply lifting a lever never missing a second of action. With no bowl clamp required, aktiv heads, combined with flowtech tripods, can go flat to the ground for the perfect low-angle shot. Clear confirmation that the camera is level comes from the illuminated PrismBubble visible both from above and the side, making levelling easy even when the camera is positioned above the operator.

With the aktiv system's SpeedSwap feature, operators can quickly switch their camera between a tripod or a slider in seconds to capture shots that have previously been unavailable with limited time.

Visit [www.sachtler.com/en/aktiv](http://www.sachtler.com/en/aktiv)





## Sony Expands Cinema Line with FX6

**SONY HAS ANNOUNCED** the FX6 camera (model ILME-FX6V), part of its Cinema Line which also includes the VENICE and FX9 cameras. The FX6 incorporates Sony's core technologies of image sensor, processing engine, and AF (autofocus) performance. It is also compatible with the wide range of Sony E-mount lenses.

The new camera features a 10.2 MP full-frame back-illuminated Exmor R CMOS sensor that delivers a 15+ stop wide dynamic range with high sensitivity and low noise. FX6's base sensitivity is ISO 800 with an enhanced sensitivity setting of ISO 12,800 - expandable to 409,600 - for shooting in low and very low light conditions. It is capable of recording in XAVC All Intra 4:2:2 10-bit depth with stunning image quality in DCI 4K (4096 x 2160 - up to 60p), QFHD 4K (3840 x 2160 - up to 120p) and FHD (1920 x 1080 - up to 240p). The FX6 can record in XAVC Long GOP 4:2:0 8-bit QFHD 4K (3840 x 2160 - up to 120p6) and 4:2:2 10-bit FHD (1920 x 1080 - up to 240p). FX6 also includes a BIONZ XR image processing engine, first used in the new Sony Alpha 7S III camera, providing up to four times faster processing performance compared to the FS5 II.

The FX6 offers advanced cinematic colour science including S-Cinetone for richer tonal reproduction, as well as S-Log3, S-Gamut3 and S-Gamut3.Cine for post-production flexibility. Leveraging the colour science of VENICE, FX6 also allows productions to easily match footage with other cameras in the cinema line.

Drawing on Sony Alpha's AF features, FX6 offers Fast Hybrid AF by combining 627-point focal plane phase-detection AF, with advanced Face Detection and Real-time Eye AF in high frame

rates, with continuous AF, allowing camera operators to effortlessly and precisely track fast-moving subjects in slow motion without losing focus. Fast Hybrid AF works with over 50 native E-mount lenses, and at 4K 120p. The camera can also capture up to five times slow-motion with 4K (QFHD) 120fps.

The new FX6 also offers internal electronic variable ND filters for control of the camera's filter density. Users can set variable ND to auto, or adjust the filter density manually in smooth increments from 1/4 to 1/128, for perfectly exposed images without affecting the depth of field or shutter angle, even during changing lighting conditions.

Built with a durable magnesium alloy chassis, measuring just 116mm x 153mm x 114mm, and weighing just 0.89kg, FX6 has a compact and lightweight design making it easy for users to grab and shoot at any time. FX6 also features a modular design allowing users to easily pair accessories, such as grips and viewfinders, or attach the camera to other mechanisms, such as gimbals and drones.

FX6's 3.5-inch LCD Viewfinder can be attached on multiple locations of the camera body for added freedom, and easy menu control with touch operation. Using a quick access control menu for commonly accessed features, camera operators can change key settings with a single touch - including Codec, Imager Scan Mode, Picture Size and Frequency, Base ISO and Sensitivity, Shooting Mode and Audio Levels.

FX6 includes a 12G-SDI output that also supports 16-bit RAW, HDMI output, timecode



in/out, built-in Wi-Fi and four channel audio recording (via XLR Interface, Multi-Interface Shoe and built-in Stereo Mic). The new camera also features two media slots compatible with CFexpress Type A cards for higher overall capacity, and faster read and write speeds, in addition to SDXC UHS-II/UHS-I cards.

Sony's Catalyst Browse/Prepare software facilitates fast and easy editing. Users can import FX6's image stabilisation metadata into Catalyst Browse/Prepare to transform handheld footage into smooth and stable visuals. FX6 also has a dedicated Clip Flag button to easily filter and locate preferred takes using Catalyst Browse/Prepare. This software also reflects metadata indicating when FX6 is rotated or in its normal position, eliminating the need to rotate footage beforehand. FX6 is also compatible with Sony's Content Browser Mobile App to monitor and control focus, iris, and zoom remotely.

Visit <https://bit.ly/3nFrVoi>

## Panasonic Box-Style Mirrorless Cinema Camera

**PANASONIC HAS RELEASED** its first box-style cinema camera, the LUMIX BGH1 Digital Single Lens Mirrorless Camera.

The BGH1 supports tight shots requiring a camera that can fit into a limited space, the connection of additional peripherals for camera control, and has fittings to attach accessories such as cages, gimbals and handles. Its versatile operation includes shooting mounted on drones, IP remote control, direct live streaming and more.

Using the Micro Four Thirds System mount, the new LUMIX BGH1 takes advantage of high mobility, an extensive interchangeable lens line-up.

The BGH1's durable, lightweight body is composed of aluminium and magnesium alloy, and the camera weighs just 545 grams.

The BGH1 complies with Power over Ethernet (PoE+), which allows the camera to be operated and powered using a single Ethernet cable through compatible peripherals. Control over a maximum of 12 BGH1 cameras will be available using Panasonic PC software LUMIX Tether for Multicam. A future firmware update will support wired IP streaming (RTP/RTSP).

Terminals include USB 3.1 Type-C; plus 3G-SDI and HDMI Type-A which can be used for simultaneous output. GenLock IN and Time Code IN/OUT functions enable multi-angle synchronised video recording and support a scalable system with third-party external monitors, rigs and gimbals - making the camera ideal for virtual reality video, bullet time and homography. The BGH1 is equipped with two SD Card slots for backup or relay recording.

The BGH1 integrates a 10.2-megapixel Live MOS Sensor with Dual Native ISO technology and Panasonic's Venus Engine. The sensor can leverage a dual-base ISO setting, resulting in minimised noise and outstanding image quality from low to high sensitivity. This feature teams up with the Venus Engine processor to deliver a maximum ISO of up to 51200.

The BGH1 enables 4:2:0 10-bit C4K/4K 60p / 50p internal video recording as well as C4K/4K 4:2:2 10-bit output over HDMI. The camera records video with a designated gamma curve compatible with ITU-R BT.2100, and Hybrid Log Gamma is available with a low-bit-rate recording mode C4K/4K

HEVC /H.265. The camera is pre-installed with



V-Log L gamma profile, offering a wide dynamic range of 13 stops.

Variable Frame Rate lets users record overcranked/undercranked video in C4K/4K (60 frames per second, maximum 2.5x slower in 24p) and FHD (240 fps, maximum 10x slower in 24p). The minimum frame rate for quick motion video is 2 fps.

The camera also incorporates an improved Deep Learning autofocus algorithm that offers greater accuracy in detecting specific subjects - including humans, people's faces, and fast-moving animals.

Visit [www.panasonic.com.au](http://www.panasonic.com.au)





## Riedel Powers Video and Comms for Thoroughbred Racing Productions

**THOROUGHBRED RACING PRODUCTIONS** (TRP), one of leading providers of production services for the Australian thoroughbred horse racing industry, has migrated its communications and signal routing infrastructure to Riedel Communications' Artist digital matrix intercom, Bolero wireless intercom, and MediorNet real-time network. The centerpiece of the Riedel installation is TRP's largest OB vehicle, HDOB1, which has undergone a modernisation to Bolero from its previous two-way radio intercom system.

Based in Melbourne, TRP covers 525 thoroughbred events throughout the state of Victoria and produces over 3,500 hours of live HD racing broadcasts every year. The new 22-camera, 14.6-meter HDOB1 trailer, designed by TRP and built by Sony, is a mainstay at high-profile Spring Racing Carnival, which includes one of the world's high-profile races, the Melbourne Cup.

"Of all the intercom solutions we considered for the HDOB1 upgrade, Bolero offered the most advanced features. Coupled with the decentralised signal routing flexibility of MediorNet, Bolero gives us outstanding voice quality, reliability, and range," said Charles Cole, Engineering and Technical Operations Manager, TRP. "Bolero has simplified comms for our field operations, but at the same time, it gives us massive capacity over traditional RF communications. Setups, changes, and additions that were always a challenge before are now easily done with a few mouse clicks. Plus, we've seen a considerable reduction in distribution and interconnect costs within our facility."

Previously, TRP's main facility relied on a two-way radio field communications workflow and a traditional, centralised video router, with racecourse infrastructures that varied from racetrack to racetrack. TRP faced challenges common to any operation that relies on multiple two-way radio channels for communications: licensing issues related to multiple users on a single frequency who were attempting to use the frequency at a particular site, interference, and the complexities of spectrum management for large productions with multiple vendors. Bolero eliminates all of these issues

working with a MediorNet MetroN core router and 21 MediorNet MicroN nodes, including fly-away frames and integrated multiviewers. The integrated Riedel solution enables modular and seamless distribution of video, communications, and data signals within each racecourse for broadcast production.

The Bolero-MediorNet combination has removed the bottlenecks of the previous intercom setup, giving each field communications position a discrete channel and enabling teams to work independently and efficiently. Before, the reliance on the single video router meant that users were constrained by the size of the router and design of the OB unit infrastructure; with MediorNet, each position is able to access all signals without affecting others.

"TRP's installation is a real milestone — the first OB truck project in Australia in which Bolero replaces a previous two-way radio workflow. The deployment is especially notable for its heavy focus on IP-based solutions, leveraging Riedel's expertise in IP-based workflows based on the SMPTE ST 2110 standard for broadcast," said Espen Brynildsen, Technical Solutions Manager, Riedel Communications Australia. "One of the key success factors for this project was the outstanding cooperation and open communication amongst Riedel, Sony, and TRP around aspects such as switch functionality and network optimisation. It's another example of TRP's technology leadership and outstanding track record in broadcast coverage for thoroughbred racing."

Visit [www.riedel.net](http://www.riedel.net)



## Nine Launches Stan Sport

**NINE HAS ANNOUNCED** the launch of Stan Sport, a live and on-demand premium sport package to be offered as a bundle to Stan's streaming customers, with the initial content through 2021 stemming from Nine's new partnership with Rugby Australia.

The parties have reached an in principle commercial agreement between Nine and Rugby Australia, pending SANZAAR sign off. The three-year deal will include live free-to-air and ad-free subscription coverage and is worth approximately AUD\$100m in cash and contra. There is also a two-year option for Nine to extend.

Further to rugby union, Nine is looking at opportunities to invest in a range of additional exclusive sports rights, on either a pay or cross-platform basis, focusing on content aimed at driving its long-term subscriber growth and profitability objectives.

Next out of the change rooms will be tennis with Nine and Stan announcing they have secured the international rights for two of the world's greatest sporting events, Wimbledon and Roland-Garros, having agreed to terms for three-year deals for the two Grand Slam tournaments.

Content from the two leading sporting tournaments, including the women's and men's singles finals, will appear across Nine and Stan's

multiplatform channel offering, with coverage appearing on free-to-air television on the 9Network and building out the newly announced Stan Sport ad-free subscriber sports proposition, which was announced on Monday.

According to Nine, the launch of Stan Sport will enable Nine to deliver a "whole of television" approach to sports as it offers extensive live and on-demand coverage to Stan subscribers, as well as making select premium events available on Nine's FTA television channels. The move will allow Nine to choose the appropriate platform for its various sports offering while also enabling our partners to fulfil their growth ambitions.

### RUGBY LEAGUE

Nine Entertainment's on-demand sporting coverage has passed significant milestones in 2020 with the company reporting that October 24th's NRL Grand Final Match between the Penrith Panthers and Melbourne Storm recorded was its "the biggest Live BVOD Audience of all time".

The match, which saw the Storm claim its fourth Premiership title, secured a Live Average BVOD Audience of 153,000 on 9NOW, peaking at 282,000 (BVOD Reach). This equates to 19.6 Million minutes and 500,000 stream starts.

Overwhelmingly, the content was streamed by

People 25-54, with that demographic accounting for 64% of viewing.

The digital audience for the NRL Grand Final drove 9NOW to achieving its biggest BVOD streaming day ever, with a total of over 57.5 million minutes of content streamed.

9NOW is Australia's No. 1 commercial BVOD service, with a commercial free to air share of 41.39%.

9NOW continues to dominate live streaming, taking out the Top Four biggest live streamed programs year-to-date across commercial free-to-air television:

- NRL Grand Final Match: 153,000
- NRL Grand Final Presentation: 88,000
- 2020 Australian Open D14-Men's Final: 86,000
- Married At First Sight Finale: 79,000

Hamish Turner, Nine Program Director, said:

"What these figures illustrate is that live sport is such a significant growth area for 9Now. To have more than a quarter of a million people tune into the match via 9Now is a phenomenal result. In the coming months the State of Origin and Australian Open will also deliver significant year-on-year growth to the platform."

Visit <https://www.nineforbrands.com.au>



# ROSS LIVE 2

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**ROSS LIVE SEASON 2 KEYNOTE**  
*with David Ross*

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## Gravity Adjusts Orbit in the New Normal

Adrian Jenner is Director of Technology at Gravity Media in Australia. He recently took part in a C+T/LiveU webinar, 'Restarting Live Sports in the New Normal', where he outlined the impact of COVID-19 on the company's activities.

**C+T: It's been a big year for everybody. How has it affected Gravity Media and your operations?**

"It's affected us globally, being a global company. We've got knock-on effects from how COVID has hit different countries, harder in other places than others. We also do a lot of international events as well, so we rely on a lot of international travel for both our technical crews and, also, the participants in the events that we are actually running.

"We've kept ourselves busy here domestically with things like Super Cars who run a very compressed calendar. And we've worked – because a lot of those events have to be done on site obviously, at racetracks. You're still working in confined spaces like trucks so we've had to learn to deal with those kinds of environments and through COVID plans make those spaces safe and still useable.

"Light entertainment, we had a couple of high-profile issues with COVID and some shows that we've worked on where whole shows have been shut down or the production has to be relocated at the last minute. There have been some trying times there but we've managed to negotiate around most of those events. With events and conferences not happening, a lot of those guys who traditionally wouldn't have looked to us for solutions, we've helped them a lot with finding adequate alternatives to give events and conferences onto platforms so they can keep going.

"In a world that's flooded with webinars, it's hard to try and get their focus on webinars. During this COVID period, everyone has been throwing out webinars and trying to get people's eyeballs on them, is quite difficult.

"And lastly, we've got the Grand Slams that we've been doing around the world with tennis. We had US Open, which is a really good example, one of the first big events to kick off during the height of COVID where we had a couple of exposures to COVID onsite. It was learning that process of

shutdown, clean, reopen as quick as possible and just get on with the event."

**That experience of the US Open, is that something you've been applying locally?**

"Lessons we've learnt there, we're utilising less crew, distancing, using some remote techniques within our traditional production such as where we'd normally had manned cameras or particular manned equipment near a talent or just being able to separate people. Also, utilising that crew differently in dual roles where they've got to be in a certain environment or just the ramping up and ramping down of facilities to cater for a much-restricted production."

**With remote techniques, what are you looking at there?**

"Particular examples that we can speak to would be utilising remote cameras where we traditionally wouldn't, or productions wouldn't have allowed that kind of level of production. We found a lot of production companies and clients getting a lot more comfortable with using technology down the stack a little lower than they usually have, just because they're desperate for content and any way of giving the engagement that we had previously with a traditional high-end production that we can try and do with some different technologies."

**What role has bonded cellular played for you guys?**

"We've been playing with bonded cellular stuff for quite some time in our Tier B, Tier C sports that we've done. A good example for you would be golf. We ran a few events using a full remote production model in that one with roving camera vacs moving around the golf course. We've supplemented by other technologies to just – UHF comes extended over four wires, over IP, back to the remote centre where it was all being cut.

"With golf, it's over a large area with very changeable coverage, especially cellular coverage, so you've really got to survey those

sites really well and cater for those black spots which can change on the day. You've got to be quite dynamic on those ones, especially as cell towers get overloaded with crowds – if there are crowds.

"We found more and more rural sites actually have better coverage than some of the metro sites that we go to. To cater for those black spots, we filled islands of connectivity in those black spots using different techniques. RF, point links, IP runs and Wi-Fi hot spots in those locations, just to fill in that coverage. But the biggest things we've learnt with those early days of cellular bonding productions is really around communications and also, how to band communications as well. When those communications fail, everyone needs to know what they're to do because things can fall apart very quickly if no one knows what they're doing and it all goes black."

**In that situation, the mix of technologies, how reliable do you find them working together?**

"The reliability is built up by tiering and having always something to fall back on. In a set-up where you're not in full control of everything as you would do in a traditional broadcast, you'd have multiple levels of redundancy, you know exactly what's going to happen. In those set-ups where you're sending out field facilities with a lot of unknowns,



**"We've kept ourselves busy here domestically with things like Super Cars who run a very compressed calendar. And we've worked because a lot of those events have to be done on site obviously, at racetracks. You're still working in confined spaces like trucks so we've had to learn to deal with those kinds of environments and through COVID plans make those spaces safe and still useable."**

even because you're having to utilise local cameramen that might not know the equipment, you've got to have one person who knows what they're doing on site that can then coordinate everything.

"And also, a fall-back plan remote to the site as well if you start losing paths and just continue to cover it through the posting set or if the production hasn't got the budget for that, back to pre-produced material and those kinds of techniques just to get you back into the narrative of the production.

"Golf's quite a good one because you're jumping around between holes and if you've got that continuity through a downstream voiceover, then you can keep the narrative going and the production flowing even if there are some technical issues with certain holes that

are being covered by certain equipment."

**How do you see the future in this pandemic environment? And how is that going to influence your technology choices?**

"Zoom calls have become an acceptable format for two-ways on primetime productions, news, etc., a lot more than they were. Clients are much more open to economical solutions to things in these times, so where we normally transport things with



## IOC Awards Beijing 2022 Rights

**THE INTERNATIONAL OLYMPIC COMMITTEE** (IOC) has awarded Seven West Media Ltd. (Seven) the Australian broadcast rights for the XXIV Olympic Winter Games in Beijing in 2022.

Seven has acquired broadcast rights on all media platforms for Beijing 2022. As announced in 2014, Seven will also continue to be the IOC's broadcast partner in Australia for the Games of the XXXII Olympiad in Tokyo.

IOC President Thomas Bach said: "The IOC is delighted to announce an extension to our agreement with Seven in Australia. We have a partnership that dates back to the Olympic Games Melbourne 1956, and Australian sports fans will be able to count on Seven's sports broadcast expertise and passion for at least another edition of the Olympic Games in Beijing in 2022. In addition, as the IOC redistributes over 90 per cent of its revenues, the financial support of our long-term commercial partners benefits the athletes, including the Australian Olympic team for Beijing 2022, and the entire Olympic Movement. This solidarity is more important now than ever."

Kurt Burnette, Seven West Media Chief Revenue Officer and Director of Olympics, said the announcement, "... solidifies Seven as the destination for the biggest events. In the space of seven months, we will be the exclusive broadcaster of Tokyo 2020 and now Beijing 2022. Both events are set to deliver unparalleled



audiences, amplified by Beijing 2022 being the third consecutive Olympic Games we've broadcast in a favourable time zone for Australian audiences, just two hours' difference from Australia's east coast. PyeongChang 2018 broke records on broadcast and digital, and we know Beijing 2022 will set new records again."

Lewis Martin, Managing Director for Seven Melbourne and Network Head of Sport, said: "In July next year, we'll bring Australian audiences the Olympic Games Tokyo 2020 with a level of coverage never before available for free in Australia for an Olympic Games. Multiple broadcast channels, dozens of digital streams on 7plus, all available on any device a viewer might choose – it's going to be an exceptional experience. Just seven months later, we'll build on that coverage with Beijing 2022, giving Australian audiences a new level of coverage for an Olympic Winter Games."

Visit [www.olympic.org](http://www.olympic.org) and [www.sevenwestmedia.com.au](http://www.sevenwestmedia.com.au)

## ABC Radio Australia to Broadcast NRL into the Pacific

**ABC RADIO AUSTRALIA** has signed a three-year deal to broadcast coverage of the National Rugby League men's and women's competitions to audiences in PNG, Timor-Leste and across the Pacific. ABC Radio Australia is broadcasting ABC Grandstand's live coverage of the NRL finals as well as the women's competition – the NRLW – and the State of Origin series.

Head of International Strategy, David Hua, said the ABC was the only Australian radio broadcaster providing coverage of the NRL to a region that is passionate about the sport.

"NRL is PNG's most popular sport

and one of the leading sports across the Pacific," he said. "Almost half of the current NRL players have Pacific Island heritage which means there is an incredibly high interest in the competition right across the region."

The start of the NRL coverage coincides with the launch of a new ABC Radio Australia Pacific sports show Can You Be More Pacific, hosted by Fijian-Australian comedians Joseph 'Roq' Rokoqo and Ratu 'Cav' Cavuili. The one-hour show will broadcast on ABC Radio Australia on Thursday evenings at 6.00pm PNG time.

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## Ross Releases Version 10 of XPression Graphics Platform

**ROSS VIDEO HAS ANNOUNCED** the release of Version 10 of its XPression real-time motion graphics platform. XPression V10 adds enhanced support for HDR workflows, multi-engine control for non-MOS workflows, HTML5 enhancements and third-party vendor support.

Ross has enabled customers to evolve their workflows and work in HDR on XPression as standard since version 8.7, launched in July 2018. In XPression Version 10, users can now load 48-bit and 64-bit PNG files as HDR materials, to produce real-time motion graphics content that integrates into HDR workflows and supports the most demanding, leading edge productions.

"The introduction of non-MOS workflow XPression Sequencer Gateway extends the power of XPression Remote Sequencer," notes Patrick Twomey, Director of Product Management for XPression. "Workflows featuring a single operator controlling multiple engines of XPression can now be applied

to more traditional program formats such as talk shows, live sports, entertainment and current affairs programming that may not use a MOS Newsroom for rundown creation."

XPression is an important part of the Ross ecosystem of live production solutions, and so additions to the XPression API allow for greater integration of XPression with custom development, user interfaces and automation control. Equally exciting is the tighter integration to Ross DashBoard, the open interface control platform. XPression customers have been able to use DashBoard for quite some time, but until now



the DashBoard API has been a chargeable option. Starting with XPression Version 10, the Dashboard API is now included as part of XPression Studio. The Dashboard API allows for a simpler view of the XPression Sequencer for less experienced operators.

Visit [www.rossvideo.com](http://www.rossvideo.com)

## Roland Unveils P-20HD Video Instant Replayer

**ROLAND** has announced the P-20HD Video Instant Replayer, an affordable hardware solution for bringing professional instant replay capabilities to any live production setup. Offering simple operation and seamless integration with most Roland A/V switchers and HDMI camcorders and cameras, the P-20HD is suited for video production for school sports, coaches, trainers, esports, and more.

Using intuitive controls and the integrated colour LCD, a single operator can cue up replays of action to let fans relive important moments, either on a streaming feed or live event screens in the venue - or both at once.

The P-20HD records directly to high-capacity SD cards. Action can be replayed in forward, reverse, or slow motion, stepped through frame by frame, or frozen for detailed analysis. The game is continuously recorded in the background during replays, with no gaps in the action.

The P-20HD panel features an array of dedicated hardware controls for a hands-on, frustration-free experience. Transport buttons include play, pause, forward, rewind, mark in, and mark out. A jog/shuttle wheel with optical encoding provides precise, fluid control to scrub clips for replay and editing, while the T-bar directly adjusts playback speed. A Speed Range function offers ultra-fine control, perfect for focusing in on tight action and contested plays.

With its onboard colour display, the P-20HD makes it simple to manage and execute workflows in real time. In recording view, the screen shows the current video input, plus critical



SD card information like recording duration, remaining storage space, and available time. And in playback view, users can display cropped previews of all video clips for live replay or later compilation.

After the action is over, the media playlist builder makes it possible to aggregate clips into curated pro videos, letting users celebrate the best moments of a game on social media or distribute practice and training sessions to coaches and players for evaluation. The P-20HD natively records in the H.264 format, so files can be uploaded to most platforms with no conversion steps in-between.

The P-20HD can be used on its own, or upstream or downstream of any Roland video switcher. Users can connect two video sources via HDMI and switch/composite between them for replay capture. Both HDMI inputs feature built-in scalars, providing worry-free connectivity with nearly any source.

The P-20HD is expected to ship in February 2021. Via future firmware updates, Roland has a roadmap for additional capabilities that include annotation, RS-232/LAN support, external footswitch control, file import/export, multimedia playback, and more.

Visit <https://bit.ly/3nnWbUu>

## EVS Cerebrum GO Training

**THE FORCED CANCELLATION** of live sports and other events in 2020 has led to a new reality for broadcasters as they attempt to deliver the best programming for viewers and remain competitive in a rapidly changing market. Production engineers now find themselves under additional pressure to adapt their workflows and processes and rethink the way they deliver live events.

EVS has moved to provide a range of programs designed to support production engineers and recognise the vital role they play. Close to 1200 industry professionals have already signed up to the EVS Cerebrum GO online training course which was made available at the start of lockdowns in April.

Consisting of 18 video tutorials, and finishing with an exam and an official certification, the on-demand course teaches operators how to prepare and run complex workflows with absolute ease using the EVS Cerebrum broadcast control and monitoring system. Those engineers who complete the course will optionally also be added to a centralised database of certified EVS Cerebrum engineers.

EVS is also publicly sharing innovative designs for workflows, panels and GUI interfaces put forward by production engineers from around the world. The Workflow Genius Wall of Fame is available to view on the EVS website, and additional designs can also be uploaded from there.

Visit [www.EVS.com](http://www.EVS.com)



>> continued from p18

traditional acquisition methods, LiveU, for example, does have a place slightly higher in the stack than it did before.

"I talk about the technology stack on where different clients are comfortable in using. There's a number of technologies that we've been deploying during this period. LiveU is definitely a strong one of them, where cellular bonding has really got to be critical to the event. We also use some open standards equipment as well which a lot of clients are actually requesting to integrate directly into their platforms.

"We've also found that during this period of downtime for a lot of manufacturers, there's been a lot of thought and effort from those companies where they're not making sales and their teams aren't out there engineering or building equipment. They're in dev mode and there's lots of R&D going on and there's a massive flip of the road maps of these companies targeted to remote production, distributed production and just the focus has shifted because they can see this is the way it's going to be for a little while yet. And there's a lot of new toys out there that perhaps we wouldn't have ever looked at before.

"Previously having or think that they're just sort of pro-AV or a tier that clients wouldn't appreciate that we are actually able to incorporate now. A lot of it is client-driven with the technology choices but integrated, I mentioned the traditional broadcast, isn't necessarily the easiest thing in the world. When a client comes up with an idea of incorporating 90 Zoom calls into a production, each with an individual IP, each with its individual returns. Trying to integrate that into an SDI or IP workflow is quite a head-scratcher and that's the sort of smart sauce that we've learnt over this period, of a bit of tech that we would never have normally have touched, integrating it with some new stuff that we've developed."

#### How much are you looking forward to 5G?

"I'll look forward to it when they actually start deploying the full feature set of 5G. At the moment, it's a great bit of bandwidth because it's got very little utilisation on it and you can get some decent speeds in certain very small areas. But it's only really going to be useful for us when they start doing micro cells and larger deployments in high densities that we could actually utilise it properly for broadcast.

"There are some possibilities in say, the CBD and cities where it's great but that caters for very few of our events, really. But when it does, it's going to really change things but I just don't see it being here for quite some time yet. The amount of infrastructure that's actually required to make it happen is so – there's so much fibre that has to go in to make it happen and that deployment is going to take a lot of time and a lot of interfacing with buildings and owners of infrastructure to be able to place that infrastructure into them. It's going to be an absolute nightmare, so I reckon 3-5 years before it's actually usable."

**"Zoom calls have become an acceptable format for two-ways on primetime productions, news, etc., a lot more than they were. Clients are much more open to economical solutions to things in these times, so where we normally transport things with traditional acquisition methods, LiveU, for example, does have a place slightly higher in the stack than it did before."**

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## Australian Media Outlines Conditions for News Media Bargaining Code

**FREE TV AUSTRALIA**, Sevenwest Media, Nine, TEN, Commercial Radio Australia, NewsCorp, The Guardian, WIN, Prime Media Group and Southern Cross Austereo have issued a joint statement on inclusions for the News Media Bargaining Code which came out of the Australian Competition and Consumer Commission's Digital Platforms Inquiry, aimed primarily at Google and Facebook.

According to the group, the final Code must include:

- Final offer arbitration – this clear and straightforward arbitration model limits incentives on each party to make ambit claims. This is a far more appropriate model than the more traditional slow and expensive arbitration approaches.
- Strong protection against discrimination – in other jurisdictions Google has used its bargaining power to avoid making a fair contribution towards the cost of content

creation. Facebook has threatened to do the same in Australia. The Code must include protections against these unreasonable tactics.

- Cover all services – The Code must apply to the full suite of products offered by Google and Facebook, including Google Search and its variants, Facebook News feed, and Instagram.
- Information exchange – The digital platforms must be required to exchange all relevant information with news media businesses that is required for a fair and balanced commercial negotiation.

According to the group statement, "Internationally, digital platforms have been slow to agree to the proposition that they should pay a fair value for the news media content they use.

"It is a fact that the Code will not require the platforms to provide any additional user data to news media companies. The Code will not stop them from making changes to their algorithms,

or require special treatment for news media businesses.

"We agree that the Code must be fair to all parties and take into account relevant costs and benefits, including any potential "undue burden" on the platforms' commercial interests.

"It is great news for Australians that the Morrison Government has committed to act on this legislation before the end of the year.

"Google has publicly said it wants to help fund the future of Australian media. That is certainly something that we welcome. Supporting a fair and reasonable Code is the first step. The Code is essential to arrest further declines in professional news content in Australia – something our democracy depends on.

"This is a critical moment in public policy development. It is too important to miss."

Visit [www.freetv.com.au](http://www.freetv.com.au)

## LiveU Breaks Usage Records on US Election Day

**LIVEU, THE DEVELOPER** of live video streaming and remote production solutions, has played a pivotal role in the live coverage of the US Presidential Election. With a mix of LiveU portable transmission solutions, including its flagship HEVC units, bonded LU-Smart app, and LiveU Matrix, the company's IP contribution and distribution solution, around 700 broadcasters from around the world were able to provide comprehensive live news and updates of the highly publicized election worldwide.

"LiveU experienced an unprecedented 16,540 live streams on Election Night," said Mike Savello, LiveU VP of Sales, Americas. "This year has challenged our broadcast customers to approach live newsgathering in unique ways. The pandemic has changed studio environments, crew allocation, budgets, and workflows. What has remained consistent is LiveU's ability to provide high-quality, flexible solutions that news organizations can rely on, especially to cover high-profile news and events."

The 2020 Election brought record-breaking numbers in the utilisation and value the LiveU solutions delivered compared to the 2016 Election – a 35% increase in portable transmission units' usage to 2764 units from 1800 in 2016 and an over 30% increase in simultaneous live streams to 1760 from 1200 in 2016.

LiveU Matrix proved to be mission-critical on Election Night with nearly 500 customers consuming 3700 live feeds for distribution to local, national and global news broadcasts. The platform delivered more than 12,000 hours of video over the course of election day without interruption. LiveU's global cloud-based video management and distribution platform allows global news teams to share high-quality, low-latency live feeds with multiple internal and cross-organizational end points.

"The sheer amount of content shared and distributed was tremendous," added Savello. "The platform was able to successfully support the rapid influx of content without interruption or failure. This demonstrated the power of LiveU Matrix during an ongoing live event."

Visit [www.liveu.tv](http://www.liveu.tv)

## New Avid Mobile Apps Deliver News from Anywhere

**AVID HAS INTRODUCED** mobile apps and support for third-party newsroom computer systems (NRCS) via its media workflow platform, MediaCentral.

MediaCentral is a platform for multiple users in different locations to collaborate in the creation of news content while enhancing the visibility of workflows across locations and departments. With the new MediaCentral | Collaborate app, users can align resources around stories, assign the right people to cover different events and angles and monitor progress. MediaCentral can then be used to manage the distribution of stories to broadcast and digital media outlets. In addition, the Collaborate mobile app keeps everyone on the team informed and connected wherever they are, giving supervisors real-time visibility into assignments and streamlining the remote story creation workflow.

Avid also has introduced the MediaCentral | Reporter mobile app that enables journalists to create, manage and deliver finished stories from any location to the newsroom with just a mobile device and Internet connection. Journalists also can use MediaCentral | Reporter to capture video, edit multitrack sequences, add graphics and effects, and send their stories to MediaCentral from their mobile device.

Avid continues to foster openness in MediaCentral by integrating production tools from leading vendors in the industry. MediaCentral now provides direct integration with ENPS and Octopus newsroom computer systems. This integration gives users an HTML5 MOS plugin that provides visual access to the MediaCentral platform to create placeholders, browse, search and preview content, as well as trim and edit media from within their NRCS client application.

Another example of openness within the Avid MediaCentral platform is the integration with Adobe Premiere Pro, which enables users to easily exchange content. With MediaCentral | Connector for Adobe Premiere Pro, Avid now offers a unified platform to share content for broadcast and digital news creation.

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## Ross LUCID When it Comes to AR and Virtual Studios

ROSS VIDEO has announced the launch of what it is calling a “significant new solution” that changes the way virtual solutions are configured and control.



The LUCID platform replaces the previous UX solution from Ross as the primary configuration and control interface for all Ross virtual studio and augmented reality applications. Users will immediately be struck by the brand-new user interface, and LUCID is the first Ross product to feature the new ‘Aura’ visual language that will be a key aspect of many future solutions from Ross. Highly dynamic and offering impressive new levels of flexibility, this new interface enables operators to design their own customised layouts, as well as save and recall layouts based on personal preference or production stage.

“This is a big step forward for Ross – we’re taking direct market feedback and ensuring that the increased sophistication of our virtual solutions doesn’t translate into increased complexity for operators,” notes Gideon Ferber, Director of Ross Virtual Solutions. “We have an impressive roadmap planned for virtual solutions, but every future development has to be underpinned by ease of use, speed of operation and flexibility. Making the move to this new LUCID platform now provides us with a more solid bedrock that we can develop on, and I know customers are going to find our ‘Aura’ look and feel highly dynamic and intuitive. We have already beta tested LUCID with a variety of different customers, and everyone has loved what they’ve seen. This is going to make our customers’ lives much easier and open up a great deal of creative potential.”

Visit [www.rossvideo.com](http://www.rossvideo.com)

## AVIWEST 5G Field Transmitter and Encoder

AVIWEST, THE PROVIDER of video contribution systems, has announced its new PRO3-5G and AIR-5G Series solutions, which are to be released in December. Using the 5G versions of AVIWEST’s powerful and lightweight bonded cellular transmitters, video professionals will be able to deliver live news, multicamera sports and events coverage with greater efficiency, higher quality and cost-effectiveness from any part of the world.



“5G networks are expected to bring many improvements to the current bonded cellular transmission scenario,” said Ronan Poullaouec, chief technology officer at AVIWEST. “Gigabit speeds and reduced transmission latencies are the initial advantages broadcasters can realize from 5G. Beyond the new capacities and services that 5G networks enable, our AVIWEST field units will help to maintain a consistent quality of service and make the best use of 5G network performance.”

AVIWEST’s flagship camera-mounted and backpack PRO3-5G unit features six embedded 3G/4G/5G modems that are compliant worldwide with a high-efficiency, patented custom antenna array. As the market’s most compact advanced 5G field unit, the AIR-5G features a long-life internal rechargeable battery and a large set of audio and video interfaces.

Both mobile transmitter series leverage AVIWEST’s SST (Safe Streams Transport) protocol, which aggregates multiple IP network connections and dynamically adapts video bit rates according to network bandwidth fluctuations. With SST, broadcasters can effectively protect streaming content and support the retransmission of lost data.

Visit [www.aviwest.com](http://www.aviwest.com)

## Wireless Video Links with SDI, HDMI and Wi-Fi

THE HOLLYLAND FAMILY of wireless video links ranges from a simple, single video transmitter – suitable for use by DSLR operators – through to “big production” zero-delay links systems.

Aimed at the Prosumer market, the new Mars 400S Pro-AU (the AU suffix denotes RCM compliant firmware for the Australian & New Zealand markets). The unit’s transmitter and receiver have a smaller form-factor than its heavy-duty stablemate, Hollyland’s Mars 400S-AU, but the lower profile doesn’t seem to affect the transmission distance, which is 120 metres line of sight with a latency of 0.08 seconds. It also helps with weight distribution owing to the lower centre of gravity.

A single Mars 400S PRO-AU transmitter can connect with two Mars 400S PRO-AU receivers, and the system supports SDI and HDMI in and out since the transmitter and receiver each feature SDI and HDMI connectors. Users can also transmit to one receiver and two mobile devices over Wi-Fi. To enable this, the mobile devices run the HollyView app, available for iOS and Android. With mobile devices, range is limited to approximately 90 metres line of sight – with

the restricted distance more a function of the mobile device than the transmitter itself. The transmitter will also support up to four Wi-Fi devices if you don’t use the Mars 400S PRO receiver.

The 400S PRO transmitter and receiver both incorporate an OLED screens that display the device number, signal strength, channel, video format, battery power in volts, and a variety of other data. The units are built into a strong metal chassis and weigh only about 220 grams each, and each feature a built-in cold shoe for mounting, along with a standard 1/4"-20 threaded opening, providing users with a couple of mounting choices.

Since the cold shoe is built into the unit and not an attachment, users don’t have to worry about it coming loose during the day, especially if they are engaged in run-and-gun filmmaking. The transmitter and receiver both use two antennas, and Hollyland includes a spare antenna for each unit in the event of accidents.



“Hollyland is probably not a name that immediately springs to mind when someone is thinking about wireless video links,” says Hagelaar, MD of Hollyland Australia. “It seems to be one of those brands that flies under the radar for most industry people, but is really well known by those ‘in-the-know’. Indeed, if you’ve seen a live-cross on any of the network ‘morning’ shows or watched pretty-much any locally-produced reality show, then you’ve probably seen pictures from one of the many Hollyland systems in daily use by both major program production houses and network SNG crews.”

Visit [www.hollyland.com.au](http://www.hollyland.com.au)



## Dalet Pyramid Unifies News Operations

**DALET HAS ANNOUNCED** Dalet Pyramid, its next generation solution for Unified News Operations. Designed to accelerate the evolution of news organisations with distributed teams, the company says Dalet Pyramid ushers in a new era of agility, flexibility and mobility for content creation. It provides an integrated solution for news production, content management and multi-platform distribution, all accessible through a web-based user experience. Offered on a subscription basis, the solution can be natively deployed in the cloud, on-premises or in a hybrid configuration.

Dalet Pyramid wraps all of Dalet's news innovation within a modern workspace with natively integrated tools that enable 360-storytelling and faster breaking news across all viewing platforms. News producers can create content from anywhere for all audiences with sophisticated media asset management and workflow orchestration powering all ingest, production, delivery and archive workflows. Propelling digital-first multiplatform workflows, the new solution is designed to offer remote workforces comprehensive editorial, graphics and distribution tools accessible from desktop and mobile devices.

"Editorial and production teams need to collaborate more efficiently on stories for all platforms from any location. Conversely, audiences love their news and want access on their favourite device, at all times," said Raoul Cospen, Director of Product Strategy, News at Dalet. "Tying your story line-up to a rundown limits production workflows and the efficiency for stories to be delivered across platforms. With more than two-thirds of newsrooms distributing content to an average of four platforms, it is a natural next step to refocus the newsroom away from rundowns and reimagine their operations. Dalet Pyramid gives news professionals the creative freedom to focus on the story, with collaborative tools and efficient resource planning to feed all audience platforms. It's a holistic news experience that enables great storytelling."



Encompassing 20 years of Dalet expertise in news workflows, Dalet Pyramid's digital-first content production approach offers outstanding mobility for individuals and teams working remotely as well as agility and flexibility for storytelling across radio, TV, digital and web.

As Cospen explains, "With Dalet Pyramid we have completely revamped the user workspace to offer an exceptional creative experience and all the conveniences you expect from a modern architecture including native-cloud support, configurable workflows, scalability, enterprise-level security, frequent feature updates and accessibility across devices. It's one platform to serve your entire multichannel news operations."

With Dalet Pyramid, production tasks such as ingest, scripting, audio and video editing, digital versioning and graphics are always connected to the story, enabling multi-user collaboration and speeding up news delivery to audiences. Advanced AI capabilities automate metadata tagging and provide real-time contextual

recommendations, saving valuable time logging and searching content while optimising use of all relevant assets for editorial.

Dalet Pyramid can be set up for cloud, on-premises or hybrid operations. The intuitive configuration module and open APIs give greater control to system administrators, requiring less ramp-up time. Customers opting for cloud will benefit from immense flexibility and elasticity in managing resource fluctuations, with the ability to spin up additional seats when immediate user access is needed, without the need to increase capital investment.

Dalet Pyramid will be offered in a range of flexible business models, such as subscription and SaaS, enabling news organisations to calculate resource costs with precision. Shorter development cycles and regular updates ensure users are up to date with the latest functionality with minimal operational disruption.

Visit [www.dalet.com/pyramid](http://www.dalet.com/pyramid)

## Vizrt Streamlines Workflows for Viz Story 2, Viz One 7 and Adobe

**VIZRT, THE PROVIDER OF** software-defined visual storytelling tools for media content creators (#SDVS), continues to add more powerful video editing capabilities into media production workflows with expanded integration for Adobe Premiere Pro. Editing is placed at the centre of creative workflows with the newest releases of the Viz Story easy editing tool and the Viz One production workflow manager to better meet the needs of editorial staff.

"Editors need the best possible interoperability within their production workflows," said Sue Skidmore, head of Partnerships for Adobe Video. "With Viz One and Viz Story's integration for Adobe Premiere Pro, our customers can work faster and seamlessly with video production content."

To save time when making edits without compromising quality, it is now possible to

work with video proxy content stored in Viz One directly from Adobe Premiere Pro, rather than needing to access high-resolution material.

Stories edited with Adobe Premiere Pro can be easily re-used, changed, updated later, or even replaced completely for efficient re-versioning without full re-edits with the option to burn Vizrt graphics into the video or not. Metagraphics data is automatically brought into Adobe Premiere Pro when loading material from Viz One, providing ultimate graphics flexibility. Graphics added in one project can be re-used for the same clip in other projects.

To reduce cycles when re-purposing previously used content, an editor in Adobe Premiere Pro can access and re-use Vizrt graphics that were added to a clip by a journalist using Viz Pilot Edge newsroom graphics systems. Once editing is complete, stories can be sent directly to

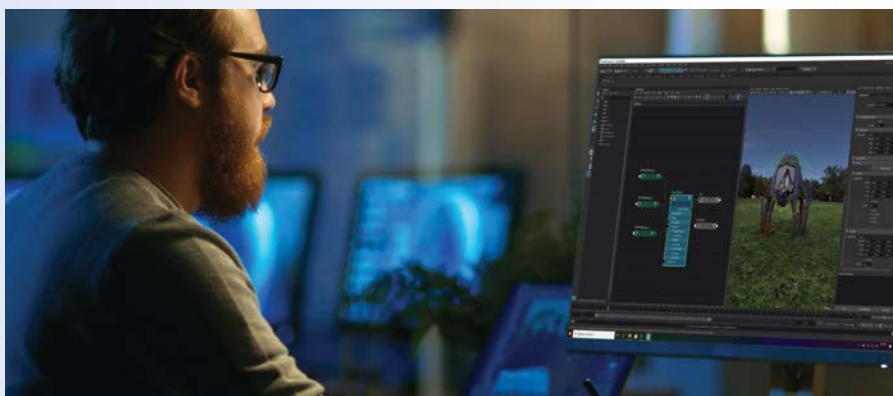
placeholders in Viz One to be used in rundowns and playlists for efficient playout.

Viz One provides partial restore of offline and archived media for both Viz Story and Adobe Premiere Pro editing clients. Automated optimization works to restore only the relevant parts needed as quickly as possible. The reduction in time and overhead is particularly useful when working remotely. In proxy mode the restore only occurs at final conform to maintain efficiency of the system.

"Video editing is a critical aspect of media production workflows," said Helen Blackburn, vice president of Product Management at Vizrt. "Vizrt adds value by incorporating the compelling capabilities of Adobe Premiere Pro for better visual storytelling."

Visit <https://www.vizrt.com>





## Skyhouse Takes to the Cloud with Digistor

**SYDNEY-BASED SKYHOUSE'S** team of dedicated, seasoned creatives formed Skyhouse Studios in early 2020 with the purpose of producing creative solutions for any visual endeavour by leveraging their scale and expertise. Recently the company were looking to get on board with cloud rendering for animation and VFX and for that they chose the Digistor Cloud Render Onboarding Package and a Digistor Customer Assurance Plan.

Skyhouse General Manager, Lydia Grbevski, explained, "We had been looking to implement AWS cloud rendering through Deadline Render Manager for a long time and began our search for a local vendor to no avail. We found overseas companies were offering a similar service but it wasn't convenient or cost effective for us to go down that route. With that in mind we were very quick to jump on board when Digistor announced its off the shelf solution that implemented AWS through Deadline as it was cost effective and easy to implement. We did need support though so, that combined with a Digistor Customer Assurance Plan, was an ideal solution for us."

The Digistor Cloud Render Onboarding Package enables Skyhouse to scale on-premise and in-house rendering capabilities into the cloud with enhanced render speed and scalability. Using cloud-based rendering, Skyhouse can now scale their rendering power in minutes to control how quickly they want to complete any project giving them incredible compute elasticity and cost control as they only pay for what they use.

Grbevski continued, "We needed a way to scale our internal render farm without having to submit renders to a separate render manager or third-party cloud rendering service. Deadline with AWS allows us to submit renders to our local farm and spin up extra machines of our choosing from the cloud. Sounds simple, but the set up was not. That's where Digistor came in. Their engineers were able to take care of the entire setup process and troubleshoot with Thinkbox and AWS. Having Digistor's help along the way, especially in ironing out those teething issues, made the process so much more simple, easy and efficient."

According to Grbevski the Digistor Cloud Render Onboarding Package is an ideal solution for

Skyhouse and indeed any company operating in the areas of visual effects, visualisation, animation and editing, who would benefit from less time spent on waiting for renders to finish, and would like to utilise Digistor's extensive experience in deploying and supporting cloud-based workflows.

Digistor's onboarding package also enables Skyhouse to take advantage of cloud rendering utilising the AWS Portal, with Digistor setting up and configuring the AWS cloud environment and helping them communicate with an on-prem Deadline environment.

AWS Portal simplifies the Skyhouse process of launching infrastructure and rendering in the cloud by extending an on-prem Deadline environment into the cloud, using AWS EC2 spare capacity - EC2 Spot. It also facilitates secure communication between the on-prem and AWS cloud environments, handling the asset transfers and software licensing.

Grbevski added, "Our setups are quite complicated and we found they would often break when we used other platforms. Amazon's cloud infrastructure mirrors the exact setup we have on premises and even remaps things to work with Linux render nodes which work out to be more cost effective than the Windows equivalent. It goes without saying that Digistor's offering has levelled up our game and in turn, levelled out the playing field. This technology has given us the ability to deliver the same level of work as some of the bigger studios and we have not had to sacrifice on quality or quantity of work due to traditional rendering constraints."

Digistor's Customer Assurance Plan was a big part of the reason Skyhouse chose the overall Digistor package as Lydia Grbevski concluded, "We were blown away by Digistor's engineering teams' commitment to make things work and never leaving us with an unfinished or untested setup. They have always provided a committed and professional service. In other words, the Digistor Cloud Render Onboarding Package is excellent and the Digistor Customer Assurance Plan is so good we are going to upgrade it."

Visit <https://bit.ly/2Vhm8Ju>

## Autodesk Shotgun Embraces 'Future of Production Management'

**THANKS TO A MORE GLOBAL** marketplace, new on-set and in-studio safety guidelines, and cloud-based opportunities, there are a host of new workflow demands in production. Based on the acquisition of technology known as Consilium, machine learning-driven generative scheduling is coming to Shotgun Software, and will enable more accurate bidding, scheduling, and resource planning decisions.

Shotgun has long embraced open standards, which are being leveraged to deliver story-in-context integrated editorial/VFX workflows so that updated effects shots can be reviewed in context of the latest edit of a scene. And asset lifecycle management, currently in early stages of development, will be built on Autodesk's cloud-based Forge platform, to enable the sharing of assets and all of their dependencies across teams and studios.

Machine learning will be coming to production management with generative scheduling in Shotgun, currently in early testing. For producers and production managers, this will make the manual and complex challenge of optimised scheduling and resource planning more dynamic, controllable, and predictive. This feature set will allow producers to plan faster, with greater accuracy and agility.

Enhanced editorial timeline support is also coming to Shotgun thanks to open standards, closing the communication gaps that can occur between VFX and edit teams. This will enable artists to access and review their work in the context of the latest edit ingest. If the edit changes, VFX teams can respond immediately, track and examine new edits, and ensure the state creative decision is informed by the current state of the cut.

Autodesk says it has long championed open standards across products to unlock enormous benefits, both for individual artists, and for studios looking to optimise their processes. They unlock scalability and automation and enable companies like Shotgun collaboration partner X2X to create a plug-in dubbed to get on-set and editorial data into Shotgun directly from within Adobe Premiere Pro. This bespoke tool was developed for the production team on Terminator: Dark Fate, but plans are underway to bring more expansive edit timeline integration and support into Shotgun.

The Shotgun engineering team is also ramping up investment to bring full-featured, open standards-based asset management to the cloud. This technology will allow studios to manage and share assets across teams and studios over the entire lifecycle of a project. To make the leap to network studios in the cloud, Shotgun will bring rich asset management features into Autodesk's proven Forge cloud development platform.

Visit [www.shotgunsoftware.com](http://www.shotgunsoftware.com)



## New Macs Power Up the M1

APPLE HAS INTRODUCED a new MacBook Air, 13-inch MacBook Pro and Mac mini powered by the M1, the first in a family of chips designed by Apple specifically for the Mac. Apple says the M1 delivers up to 3.5x faster CPU, up to 6x faster GPU, up to 15x faster machine learning (ML) capabilities and battery life up to 2x longer than before.

The new MacBook Air features an 8-core CPU which Apple says performs up to 3.5x faster than the previous generation, along with graphics up to 5x faster, and ML workloads up to 9x faster for apps such as face recognition or object detection. The M1 chip's storage controller and latest flash technology deliver up to 2x faster SSD performance.

The new MacBook Air also features a fanless design and a battery life enabling up to 15 hours of wireless web browsing and up to 18 hours of video playback.

According to Apple, the M1-powered MacBook Air can:

- Export a project for the web with iMovie up to 3x faster.
- Integrate 3D effects into video in Final Cut Pro up to 5x faster.
- For the first time, play back and edit multiple streams of full-quality, 4K ProRes video in Final Cut Pro without dropping a frame.
- Export photos from Lightroom up to twice as fast.



- Use ML-based features like Smart Conform in Final Cut Pro to intelligently frame a clip up to 4.3x faster.
- Watch more movies and TV shows with up to 18 hours of battery life, the longest ever on MacBook Air.
- Extend FaceTime and other video calls for up to twice as long on a single charge.

Other new features in MacBook Air include Apple's latest image signal processor (ISP) in the M1 chip, which improves camera image quality with better noise reduction, greater dynamic range, and improved auto white balance and ML-enhanced face detection. Support for P3 wide colour results in an even more vibrant, true-to-life Retina display. The Secure Enclave in M1, combined with Big Sur, delivers security features like Touch ID and enables secure online purchases using Apple Pay with the touch of a finger. Wi-Fi 6 capability delivers faster wireless performance, while two Thunderbolt ports with USB 4 support allow for connectivity to a wide range of peripherals.

Visit [www.apple.com/au](https://www.apple.com/au)

## Maxon Cinema 4D for M1-Powered Macs

**HOT ON THE HEELS** of Apple's M1 chip and M announcements, Maxon's Cinema 4D has become the first professional 3D animation package available for M1-powered Macs.

Maxon has a two-decade long history of being the first professional 3D package to support Apple innovations, including being the first to offer multiprocessing on the Mac, the first to support Mac OS X, the first to run on Intel Macs, the first to support 64-bit on a Mac and now the first available for the new MacBook Air, 13-inch MacBook Pro, and Mac mini powered by M1.

"Apple has a knack for developing groundbreaking technologies and M1 is no exception," states David McGavran, Maxon CEO. "The new systems deliver industry-leading speed and power, with high performance GPUs. For a 3D artist, these speed and efficiency gains will be invaluable to the creative process. Cinema 4D running on M1 will deliver a world-class workflow experience."

Visit <https://www.maxon.net>

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## Boris FX Continuum Unleashes its Biggest VFX Plugin Release

**BORIS FX'S CONTINUUM 2021** plugin collection has delivered its largest release ever. Users can instantly transform digital video into classic Hollywood looks with 80 new cinematic plugin effects and over 1000 professionally-designed drag and drop pre-sets. New creative options include film stocks, colour grades based on iconic films, optical filter simulations, lens flares, a digital gobo library, light rays and glows, and a new FX Editor to quickly browse, tweak, and save pre-sets directly within the interface.

Continuum 2021 is now available for Adobe After Effects, Adobe Premiere Pro, Avid Media Composer, and supported OFX host applications including Foundry Nuke, Blackmagic DaVinci Resolve, and VEGAS Pro. Current annual subscription and upgrade & support plan customers receive a complimentary update to the Continuum 2021 release.

Continuum 2021 new features include:

- The Cinematographer's Toolkit features 80+ HDR compliant effects including film stocks, look development, optical filter simulations, and



lighting. All effects are GPU accelerated, support OCIO colour management, and can be easily customised with the new FX Editor interface.

- Film Stocks: Transform digital video into beloved analog looks. Includes 300 customisable pre-sets organised by colour, black & white, photographic films, and motion picture film stocks including Kodachrome, Ektachrome, Fuji, Agfa, and Polaroid.
- Look Development: Establish a signature colour palette. Includes 85+ colour grading pre-sets from Academy Award-nominated films including 2001: A Space Odyssey, Apocalypse Now, Blade Runner, Back to the Future, Frankenstein, Gone with the Wind, and Titanic, 65+ stylised colour and black & white look pre-sets, and a visual Colour Wheel interface to create custom looks.
- Optical Filter Simulations: Dial in the exact look cinematographers want with digital optical filter simulations. Darken a sky with a polarising filter, reduce wrinkles with diffusion filters, saturate colours with enhancing filters, and add a pop of colour with colour-graduated filters.
- Lighting: Create a stylised atmosphere with the digital gobo library (750+ options), enhance a scene with realistic lens flares that can be customised with the new Flare Editor, add drama with volumetric light rays and glows, or choose a coloured gel from the Kodak Wratten set.
- Particle Illusion's real-time particles can now emit in 3D. New turbulence controls create

more naturally moving particles, a new line renderer lets users quickly join particles together, and new pre-sets deliver stunning particle animations.

- Primatte Studio's Academy Award-nominated chroma keying technology adds a new Edge Cleaner effect that recovers fine details while smoothing the edges of keyed compressed footage. Primatte Studio is also available as a separate plugin for Adobe hosts.
- Title Studio adds Procedural Noise Generators with dozens of different texture types, and a new Texture Composite Shader enhances the variety of textures and materials available for text and motion graphics.
- Maxon C4D integration is improved and now includes support for more texture shaders resulting in even more accurate renders.
- 1000+ drag and drop pre-sets designed by professional artists.
- Mocha planar tracking is enhanced with the new AdjustTrack feature.

Visit <https://borisfx.com>

## EditShare FLOW Panel for DaVinci Resolve Studio

**EDITSHARE HAS ANNOUNCED** its FLOW Panel for DaVinci Resolve Studio, connecting thousands of users into the wider media ecosystem. Designed to simplify storytelling, FLOW manages media assets and workflows across on-premise and cloud-based tiered storage environments. The integrated FLOW panel, which was developed with FLOW's open API, provides DaVinci Resolve users a media gateway to assets and associated metadata. Easy-to-use production tools facilitate advanced remote workflows including seamless proxy editing and review and approvals.

The FLOW Panel for DaVinci Resolve Studio lets editors, colourists, VFX artists and sound mixers move beyond their locally connected storage and search, browse, and access proxy and high resolutions versions of video and audio assets across multiple storage pools and archives. FLOW's fast production tools can be used to quickly organize assets into folders and cuts-only sequences. With one click, users can import assets into DaVinci Resolve Studio, including clips, sub clips, and sequence markers. FLOW delivers the rich metadata and content directly into the DaVinci Resolve Studio bin and onto the timeline. Users can also upload assets from DaVinci Resolve Studio back into FLOW with one click, facilitating review and approval across the operation.

Suitable for working in remote scenarios, the FLOW Panel for DaVinci Resolve Studio lets users edit with proxies - whether downloaded, streamed over a VPN, or played from central shared storage. This nimble proxy workflow benefits from the lightweight characteristics of highly efficient codecs like H.264/MP4. FLOW generates the proxies and tracks the relationship between high and low-resolution files. A menu toggle in DaVinci Resolve Studio lets users switch seamlessly between original and proxy versions, allowing them to check the original shots any time during editing. With both sets of files always available and accessible to DaVinci Resolve Studio, colour grading, effect creation and conforming are greatly streamlined.

The FLOW Panel for DaVinci Resolve Studio will be generally available with FLOW 2021.

Visit <https://www.editshare.com>

## Simon Says Brings AI Transcription to DaVinci Resolve

**SIMON SAYS, AN AI-BASED TRANSCRIPTION**, captioning and translation platform for video professionals, has announced integration with Blackmagic's DaVinci Resolve for macOS. Users can now easily find meaningful dialogue, in any language, and receive the frame-accurate video transcript as ranged markers, colour-coded by speaker, then caption timelines and even align translated subtitles once the edit is complete - all with a few clicks from DaVinci Resolve.

With Simon Says, editors can transcribe their raw footage in minutes. Simply select the clips to import and transcribe. Add speaker labels, bookmark and make any edits in the video-transcript editor. Collaborate with your team to identify the key soundbites and then export back into Resolve, receiving ranged transcript markers, colour-coded to delineate speakers, that attach back to the original clips. Editing just got a whole lot more efficient - versus scrubbing through audio and switching back to the edit list in another program.

In addition to transcribing video, Simon Says can easily and quickly caption video edits and translate subtitles into 100 languages. Use the visual subtitle editor to preview formatting and export subtitles that import back into Resolve. This will make your delivery compliant and increase accessibility to those who are hard of hearing, as well as delivery to international audiences.

To get started, users download the Simon Says app for macOS and install the Resolve scripts to communicate between Resolve and the Simon Says AI cloud.

Visit <https://www.simonsays.ai>



## Blackmagic Announces DaVinci Resolve 17 and New Speed Editor

**BLACKMAGIC DESIGN** has announced DaVinci Resolve 17, a major new release with over 100 new features and 200 improvements.

"This is a massive update and it has amazing new technology and features for colourists, audio engineers, editors and visual effects artists," said Grant Petty, Blackmagic Design CEO. "While the new colour science, HDR grading and improvements and Fairlight usability are the most noticeable features, what I am most proud of are the thousands of small improvements that customers will notice every day!"

DaVinci Resolve 17 features include:

- Next generation HDR colour correction with customizable wheels and tonal zones.
- Mesh and grid-based colour warper delivers an entirely new way to transform colour.
- Magic mask automatic object isolation powered by the DaVinci Neural Engine.
- Improved colour management with tone mapping and colour space aware tools.
- Massive DaVinci wide gamut colour space for higher quality image processing.
- High speed audio editing with new keyboard and mouse context sensitive tools.
- Fairlight Audio Core engine with



auto load balancing and support for 2,000 tracks.

- Revolutionary FlexBus architecture for audio routing without limitations.
- Automatic transient detection for beats, words, and sound effects.
- Support for massive audio projects with thousands of tracks on a single system.
- Metadata based card view in media pool on cut page.
- Precision audio trimming on the cut page timeline and graphical trimmer.
- Smart reframe powered by the DaVinci Neural Engine on cut and edit pages.
- Live effect, title, and transition previews on cut and edit pages.
- Import and edit projects from ATEM Mini Pro ISO.

- Proxy media workflows up to 1/16th resolution in H.264, H.265, ProRes or DNxHR.
- Timeline based clip syncing to create multicam and compound clips.
- Alpha support for keying and compositing on cut and edit pages.
- Render in place command for effects heavy clips on cut and edit timelines.
- Make source side adjustments before editing clips into the timeline.
- Portable timeline and bin files for easy sharing.
- Native interlace processing and realtime 3:2 pulldown removal.
- Node tree bookmarks, customizable Fusion toolbar, and vertical node layouts.
- Support for growing files in media pool.

- Support for frame-based metadata for Blackmagic RAW, ARRI, RED, Sony and EXR.
- Workflow integration API and third-party encoder API.

DaVinci Resolve 17 public beta is available for download now from the Blackmagic Design website.

Blackmagic Design has also announced DaVinci Resolve Speed Editor, a new keyboard for DaVinci Resolve's cut page that allows a new and dramatically faster editing solution that's a combination of integrated hardware and software. This means the editor can work much faster because, unlike a mouse, the DaVinci Resolve Speed Editor has a control for each edit function and can perform multiple tasks at the same time.

DaVinci Resolve Speed Editor features include:

- Source tape allows faster clip searching.
- Large trim in and out buttons.
- New keyboard modes for intelligent editing.
- Buttons to allow search dial to live trim.
- Buttons to change transition type.
- Integrated search dial control.
- Keypad for direct timecode entry.

Visit [blackmagicdesign.com](https://blackmagicdesign.com)

## Maxon Updates Cinebench Benchmarking

**MAXON, THE DEVELOPER** of professional 2D/3D digital content creation and composing solutions, has released Cinebench Release 23, an update to its cross-platform benchmarking application designed to evaluate hardware performance. Cinebench uses advanced algorithms to visualise and render a three-dimensional scene on a computer. Cinebench scores are used by hardware manufacturers to optimise CPUs during the development process, as well as press and consumers to evaluate systems.

"For more than a decade, Cinebench has been the go-to tool for hardware manufacturers and industry analysts to evaluate system performance," said David McGavran, Maxon Chief Executive Officer. "Cinebench R23 delivers the most accurate and stable results for the latest hardware, including Apple's recently announced M1-powered Macs, ensuring users are operating on the highest performing systems for demanding content creation and rendering workloads."

Cinebench is now based on the latest Release 23 code using updated compilers, and has a minimum runtime activated by default (previously hidden in preferences)

Cinebench R23 delivers more stable and accurate results for high-performance systems and allows users to check that the hardware is able to deliver the performance steadily, without throttling down due to thermal issues.

Users now have the option to directly test the single core performance without manually enabling the "Advanced benchmark" option. The "Advanced benchmark" allows users to set arbitrary minimum runtimes to stress test the hardware for even longer periods of time.

Because of the code and compiler changes, Cinebench score values are readjusted to a new range so they should not be compared to scores from previous versions of Cinebench.

Cinebench R23 leverages the same powerful 3D engine in Cinema 4D Release 23 (Cinema 4D R23) to accurately evaluate CPU rendering performance capabilities across various systems and platforms. It is offered free-of-charge.

Visit <https://www.maxon.net/>

## EditShare and Blackbird Partner to Expand Cloud Video Editing

**EDITSHARE AND BLACKBIRD** have joined forces to give media professionals more options when it comes to collaborating and editing video in the cloud. The integrated solution combines EditShare's EFS scalable storage, FLOW media management, and open APIs with Blackbird's cloud video editing and publishing platform. Optimised for both speed and mobility, Blackbird and EditShare connect users into the wider media ecosystem, making content of all types located across storage pools accessible in the proper formats for rapid editing and delivery to multiple platforms and channels.

According to EditShare CEO Conrad Clemson, "Cloud-based remote collaboration is no longer merely a "nice to have" but a necessity. Video production teams have rapidly pivoted their workflows to take advantage of the cloud's scalability, flexibility and mobility. The combination of Blackbird and EditShare delivers added value to customers wanting to incorporate quick turnaround editing into a greater production workflow."

Blackbird CEO Ian McDonough said, "Our exciting new partnership with EditShare is a great example of industry specialists building interoperable end to end solutions. Media assets stored and managed by EditShare solutions can now be accessed directly through Blackbird's browser interface where they can be professionally edited and passed back or published."

Visit <https://editshare.com> and <https://www.blackbird.video>





## MediaHub Launches ArkHub Low-Cost Archive Storage Service

**MEDIAHUB AUSTRALIA SAYS** it has completely revolutionised low-cost archive storage with the launch of ArkHub, a multi-industry agnostic solution with all the features of the major deep archive vendors but without the ingress, egress, retrieval and region costs of the major storage vendors.

According to MediaHub CEO Alan Sweeney, ArkHub was created with a broadcast industry pedigree, but meets all the needs and requirements of even the most security conscious, enterprise-level industries including government, health, banking, financial services, energy, defence, education, media and entertainment.

"MediaHub was born and earned its credentials in the media industry," says Sweeney. What we have done is we have proven our ability to handle complex high-volume, hard to transport video files, and that pedigree has allowed us to open up to all sorts of industries. ArkHub is a data and video deep archive and 'media' is in all forms of media, any form of media, across any industry.

"ArkHub is a total gamechanger that completely eradicates the single biggest complaint in the storage and archive world – bill shock," says Sweeney. "It has been specifically developed as a low-cost storage service that provides secure, durable and flexible storage for data backup-archive, with a considerably simplified pricing model.

ArkHub pricing allows clients to store their data for only a monthly storage cost, with no further ingress or egress charges, no early deletion or embargo fees and no region fees. Critically, ArkHub does not limit clients to storing their data specifically as an 'archive'. Clients can upload a single file or perform a bulk upload with no price difference as ArkHub is simply a fixed price per gigabyte per month fee.

"Face storage costs are not the cost of storage in all the other platforms," says the MediaHub CEO. "That is only like an access fee. With them, you're not buying storage, you are paying for each click. Every little thing you do within those platforms you pay for. Our business model is you buy the base storage. We don't care how many times you move your stuff around, it's your stuff, move it as much as you like. There's a fundamental difference right at the front, and that's why you don't get bill shock and that's why bill shock is such a major, major thing

"There are no retrieval costs, no early deletion fees, no data ingress costs, no data egress costs," "There's no comprehensive business support costs. There is no minimum storage duration. You can stick your stuff in and pull it out, do whatever you want with it. It's only milliseconds in access latency; so, it's instant. In every sense it's instant retrieval. You don't have to wait two days, three days and something happens in the background that you're not sure

of. It's a hundred percent availability SLA."

Connecting to ArkHub can be done either via the public internet using ArkHub WebConnect which is a secure, encrypted and accelerated web access portal or via ArkHub DirectConnect, which uses MediaHub hosted connectors.

Using ArkHub WebConnect, clients can transfer files from one location to another from anywhere in the world. Based on CatonNET's flexible and easy-to-use Cydex software, its advanced protocol allows for the fastest possible throughput with an intuitive user interface. Seamless integration with HPE's object-based S3 storage was done through MediaHub's solution provider, RedFig Group.

ArkHub functions across three independent, geographically separate sites – MediaHub in the southwestern Sydney suburb of Ingleburn, Telstra Broadcast Services in the Sydney CBD, and one of Equinix's seven Sydney datacentres.

"The system is automatic, you don't need to do anything," says Alan Sweeney. "Once you upload, the system will geographically disperse your product and it deconstructs it and it puts it into three different zones. We can lose one whole zone and it has no impact whatsoever on your product."

Sweeney emphasises the deep archive nature of ArkHub. It is not intended as a keyword-driven search index. These functions are left to a client's internal MAM system which will inform the user if an asset is stored on the ArkHub platform.

Further complementing the ArkHub value proposition is MediaHub's key foundational layer of connectivity via its FibreHub solution that enables the pricing model of zero ingress and egress fees for enterprise level clients. This in combination with FibreHub's high speeds to all the major broadcasters, as well as datacentres such as NEXTDC, Global Switch, Equinix and Telstra Oxford Falls provides an ultra-efficient launch pad for ArkHub.

MediaHub Head of Technology, Simon Scott added, "ArkHub is a highly cost effective and complete self-healing archive storage solution



**ArkHub**  
DATA & VIDEO DEEP ARCHIVE



MediaHub Australia CEO Alan Sweeney.

which has multi-exabyte scalability, is optimised for enterprise cloud environments and is 'always-on' with a 100% availability SLA and 14x9 durability SLA. We wanted ArkHub to be truly flexible and agile, which is why it is designed to be compatible with over 100 Independent Software Vendors (ISV) and over 50 backup and archive products in the market, including Veeam, Commvault, Veritas, Net Back Up, Cohesity and Ruberik."

Alan Sweeney concluded, "For clients who need safe access to their archived data, the monthly cost of ArkHub is designed to be lower than the major deep archive vendors. ArkHub allows clients to easily and accurately budget for their data storage costs without the fear of bill shock as a result of unforeseen charges from managing and utilising their valuable archived data. With even a moderate amount of archived data management and retrieval ArkHub will result in lower data storage lifecycle costs. In other words, ArkHub is a secure, reliable, robust, efficient, low cost archive storage solution for any industry."

Visit <https://bit.ly/397209S>

**"Once you upload,  
the system will  
geographically  
disperse your  
product and it  
deconstructs it and  
it puts it into three  
different zones**



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Developed as a low-cost storage service that provides secure, robust and agile storage for data backup and archive, ArkHub is the storage gamechanger we've all been waiting for, allowing you to store data and pay through a simple per gigabyte per month fee.





## Dalet Supports SDI and IP Workflows with Brio

**DALET, THE PROVIDER OF** solutions and services for broadcasters and content professionals, is providing media companies a smooth transition path to full IP production workflows with the latest version of its SMPTE ST 2110 compliant Dalet Brio ingest and playout platform. Offering maximum flexibility for creating and delivering programs and content across transitioning infrastructures, Dalet Brio 3.21 supports greater density with more ingest and playout streams, making it even easier and faster for companies to migrate operations to IP without disrupting existing workflows that still rely on SDI. IT administrators who manage media infrastructure will appreciate the ease of configuration, expansive codec support and approach to managing dual standards without compromising features or migration to full IP. The feature-rich IP capabilities with simultaneous support for SDI bring business and operational stakeholders greater flexibility when producing, managing and distributing content on-premises or in the cloud.

"Unless you are starting from scratch, there is no overnight jump to IP. We find our customers need legacy SDI workflows while they transition to IP. It's a delicate balancing act," said J  r  my Krein, Product Manager, Dalet Brio. "The Dalet

Brio platform is designed to provide our customers with a practical, flexible and cost-effective solution for transitioning their entire operations to IP environments over time, supporting everything from media management and workflow orchestration to news production and archives."

Dalet Brio provides support for content production distributed across multiple platforms as well as a variety of internet streams including SRT, RTMP, and NDI, giving media companies near unlimited freedom for creating and distributing content.

Dalet Brio supports SMPTE ST 2110 UHD workflows and SDI standards, allowing media facilities to invest in an IP infrastructure at their own pace without disrupting current operations. Dalet Brio is "IP-Ready certified" and is now part of the official JT-NM Tested program to validate support for ST 2110 and NMOS, further demonstrating Dalet's commitment to widely



supported, open standards for IP workflows. In addition, Dalet has recently joined the SRT Alliance, which optimises video streaming performance even across unpredictable networks.

Upcoming planned enhancements to the Dalet Brio platform include support for AWS cloud workflows, ingesting SRT and RTMP streams from bonded unmanaged IP networks as well as simultaneously producing MPEG-Dash on S3 and production MXF.

Visit <https://www.dalet.com/platforms/brio>

## Ross Integrates with Amazon S3 Glacier for Infinite Video Storage

**FOR MANY IN THE BROADCAST** industry, media asset management, storage and archiving has tended to be a rather mundane fact of life – a routine part of the workflow that has often been taken for granted. However, the switch to HD and now 4K-UHD formats combined with an explosion in the amount of content (for digital and complementary platforms) have seen storing and archiving taking on new levels of importance.

The average broadcaster now creates terabytes of video content every day. In parallel, decisions must be made about what is important, what needs to be stored and archived and how best to do this. With storage requirements increasing exponentially and broadcasters running out of expensive on-premise tape and disk space, a great many content producers have turned to media asset management solutions that include

cloud-based storage as part of their archive strategy.

In recognition of this, Ross recently integrated Amazon S3 Glacier storage, a storage class of Amazon Simple Storage Service (Amazon S3) as an integral part of the Ross range of Media Asset Management and Server solutions.

According to Chris Kelly, Product Manager for Asset Management & Storage at Ross, "When it comes to media asset management, we know that our customers value speed to air, reliability, redundancy, ease of use, and cost efficiency. When looking at each of these issues, Amazon S3 Glacier is a fantastic solution."

Amazon S3 Glacier removes the need for broadcasters to maintain costly in-house storage systems and with expedited retrieval, AWS can deliver files within minutes. Cost is also an obvious concern for customers in the current

climate, and Amazon S3 Glacier has this covered.

"Amazon S3 is a fantastic value solution from AWS, and Amazon S3 Glacier meets the needs of customer with a variety of needs," Kelly notes. "Amazon S3 Glacier is something that can be implemented on almost a moment's notice – once the customer establishes their AWS account, they can start archiving immediately with no limits."

"In upcoming releases of Streamline, our asset management solution, we will introduce rules-based toolsets to automate the process of moving content between multiple storage options," comments Chris Kelly. "This is where Amazon S3 Glacier will shine. The value, reliability, speed, and efficiency will further simplify the job of archiving this daily generated content."

Visit [www.rossvideo.com](http://www.rossvideo.com)

## Bluefish444 NetAccess Client for Remote IngeStore Capture

**BLUEFISH444**, developer of the multi-channel IngeStore production and archival software for Bluefish video cards, has released NetAccess, a web client for remote control of IngeStore.

IngeStore NetAccess is a browser-based client which can connect directly to and control any IngeStore Server or workstation from anywhere on a public or private network.

Each Bluefish IngeStore system supports up to four channels of capture to local or network-attached storage, recording to a variety of broadcast, post-production, archival

and streaming formats. The recording channel count can now scale up with multiple IngeStore systems able to be controlled simultaneously from the NetAccess browser client.

NetAccess provides customers a quick and easy-to-use solution for the capture of professional video feeds with flexible control from a standard browser interface. Bluefish has simplified the setup process, enabling customers to get recording immediately, with a guided installer and built-in lightweight web server.

NetAccess is built upon the IngeStore REST API, which provides an interface for the creation and integration of applications to access and control all of IngeStore's features. Established software or new developments can integrate the control of IngeStore Servers via the NetAccess source code, which can be used directly or customised to the specific requirements of the application.

Visit [www.bluefish444.com/netaccess](http://www.bluefish444.com/netaccess)



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## A Sound Backbone for Sky News Australia

By Phil Sandberg

**It was a case of looking at the big picture for audio during a recent systems upgrade at Australian News Channel (ANC), home of Sky News Australia.**

**ACCORDING TO** Audio Systems Architect Keith Cooper, what was initially a plan to replace a single, ageing Euphonix console became a network-wide overhaul bringing with it greater workflow and cost efficiencies.

"When [ANC] bought the Euphonix, they had the same amount of budget again to buy another console and replace one console. I said, 'I see what you're trying to do. You're trying to fix a problem, but you're only looking at one control room you're doing this with. Why don't you standardise the whole lot and I bet for the amount of budget that you've got I could probably design a system that would actually sort out all the control rooms and the Macquarie Park facilities. And improve the audio overall rather than just one room.' That's when I got my thinking cap on."

Under that thinking cap, Cooper envisioned a solution including Shure microphones, Cedar Noise Reduction, Lawo mixing and routing solutions, and DirectOut's Prodigy MP I/O – all under the coordination of Lawo's VSM control system.

**C+T: Can you just talk me through the setup I guess, the architecture of the studios?**

"The place has been traditionally a control room tied to a studio. They wanted a lot more flexibility and in doing so they needed a solution that gave them flexibility in the routing and so forth. They've got four control rooms, in Macquarie Park they've got four studios, and then they've also got multiple bureaus around the country. In Sydney there's one at CBD. They've got Holt Street, which is a NewsCorp building where they've got a big studio and a small studio. Dotted all the way around the country are these smaller bureaus which are three-camera studios where they'd either host from, or interview from, or put guests in, and so forth. The

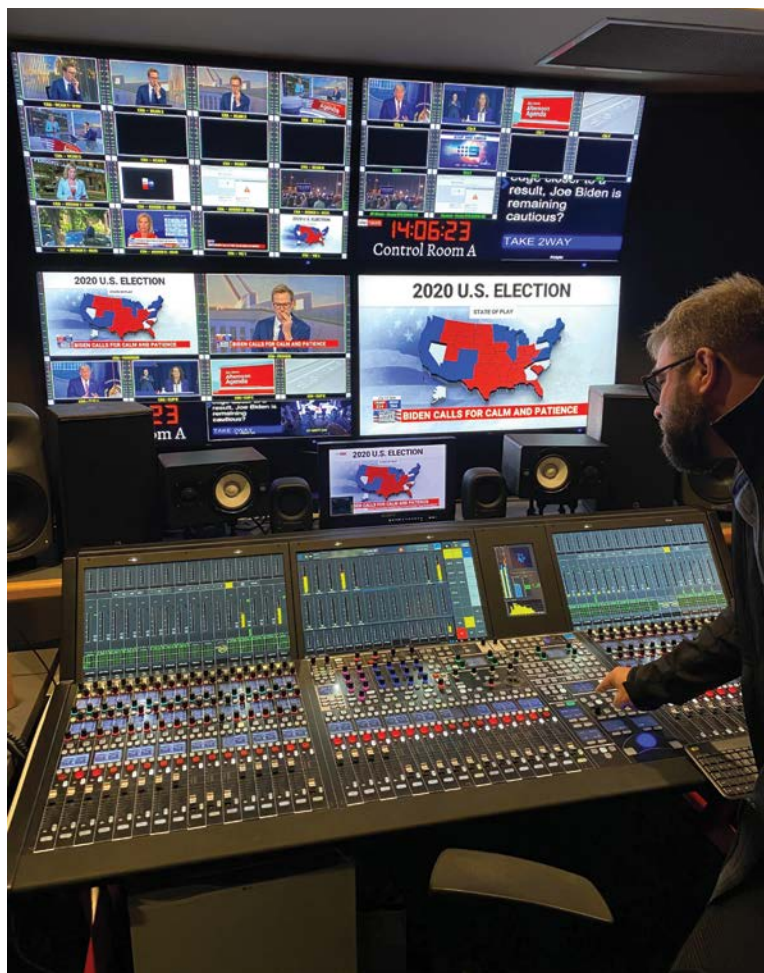
architecture is that we've got a Riedel's MicroNs video backbone system. And we're taking the audio and we're using that as our de-embedder and embedder for the whole audio structure.

"Then it's MADI from there to our Lawo Nova Core which has a surface attached to it. Everything's presented to that Lawo which acts as the house audio router and DSP farm. And then that Lawo sends the signals required to the control rooms to Lawo MC2 Micro Cores, which have no surface. There's only a GUI interface. And then Mosart, the automation system in Sky, controls those Micro Cores for the sound that goes to air for the control room. That Micro Core presents back to the main Lawo and then that sends off to be re-embedded back into the video stream at that point.

"The main Lawo also provides all the monitoring for the control rooms, the inserts for all the Cedar de-noising algorithms. It's connected to, we have three connections from the main Lawo. We use the Ravenna protocol for connecting to control rooms. We use the Dante protocol for connecting to our comms systems and radio mic systems. And we use MADI connecting to our Micro Cores and our Prodigy stage boxes. There's three different networks being used in the place to deliver all these signals"

**Does that present compatibility or latency issues?**

"Like any facility, yes, latency in the modern day does have some challenges. The system's fairly in time with everything. We're very lucky, Sky's in a very unique position where no studio hears itself. Every destination is its own mixed-minus, if that makes sense. And talent never hear their own voice that goes to air. But they hear everybody else. It's a lot of mix-minus infrastructure coming from each control room out there into the world. The biggest challenge is that our program once it's gone through the MicroN system



Sky News Audio Systems Architect Keith Cooper with new LAWOW console.

and the house router has added latency to it. Even though all the audio's been in real time we've had to obviously lip sync the program output to match pictures. In turn, what that's created is more of a backend problem with our control rooms, is that they hear the pre-fade sources out of time to the program. That's the current challenge that we've just been overcoming in this process. No artefacts to air and no lip sync issues to air so to speak, but the control room has found it a challenge. Because the control rooms are not like your TV typical control room where you'd have directors and DAs and producers and so forth driving it, they have a pilot and a co-pilot, so it's a lot like looking in a cockpit of an aeroplane. "And the third person's the producer. The producer's obviously steering

the show, and the pilot would be pushing the show to air so to speak through the Mosart system, and the co-pilot's doing all the proof-like checks of what's about to go to air, so that's the synergy they have. And then we have two rooms, Sport and Weather, which is literally a one-man operation control room. That pilot is playing producer, they're playing editor, they're playing director, they're doing all the roles in one. And humans just don't have enough hands to hit that many buttons and things so the latency effect has been interesting. Being that we've had to de-sync the monitoring in those control rooms so that audio all stayed in the natural time flow, yet our transmission of that control room is in sync. There's been some interesting challenges there."



### **What led you to pick those particular technologies?**

"I've played with every brand of console over the years. The Lawo has one of the most flexible routing systems and DSP shuffling systems I've seen. Also, the fact that there's no audio director in this facility driving and monitoring the sound. It falls under the role of the TDs. And the TDs are busy routing signals to control rooms, lining up cameras, lining up Skype calls, setting up two-way communications, so they needed a simple interface to be able to control sound. Where you'd be able to mute a microphone, to be able to increase or decrease its level, and actually see that there's a signal there, and a signal able to go to air.

"To control all this mechanism we'd put VSM in as the control source, which means that what they used to have to do was to run out of their suite, run into the audio suite, change mix-minuses, increase a level or decrease a level based on things, run back to their room and do what they needed to do. Now this has given them the workflow that they have a touch screen and they're accessing the components of these audio consoles that they need to access, rather than having to be an audio engineer and understand how an audio console works.

"What we've built is an audio facility that has a mastering style to it, so I can process and master the incoming and outgoing feeds of the studio. And the day-to-day control's being controlled by the actual pilot and co-pilot in the control room, and the TD at the end of the day.

"I sat down and designed the whole system as a solution. And I wasn't brand driven by it. I was looking for the right components that give the station the flexibility they require. Because they have a central house at Macquarie Park but they have decentralised studios we wanted to improve the front-end sound and have that controlled before it got to any audio mixer. I looked for a box that could operate independently as the pre-amp, as a mixer with DSP for compression and auto mixing level control, and I came across the Prodigy MP made by DirectOut. That is the front end which is going to be installed around the country over the next two years. We decided we'd make that the start of it here in Macquarie Park. We went with Lawo consoles as our DSP farm and routing platform. Then we needed something that was really robust as a lapel microphone for Sky. Shure had delivered a new product called TwinPlex which is a far more robust

build of a microphone, and it has a very nice warmth to it. On top of that, they also had a RF solution for us that was quite unique. They have a spectrum monitoring box that, when you set up, will scan the band for you that you're operating in. It'll pick out all the frequencies that are available in that band. It then gives you the ability to deploy frequencies to your receivers and your transmitters. Then it keeps a pool of frequencies available and it sits there monitoring the RF spectrum that you're working in. And if any one of your frequencies get a hit from somebody else, it would auto switch and retune the transmitter and receiver with only a millisecond of loss of audio.

"Because Sky has no one managing their RF infrastructure, and they want the use of lapel microphones on radio packs to be able to walk and talk on their sets, I needed to find a solution that met that requirement.

Each piece of the puzzle has been picked because of the process that can provide, and the flexibility, and also are well established in the market in their areas. Shure's become the front end. Prodigy DirectOut has become the pre-amp and swiss army knife of each studio space. Lawo's become the backbone routing and deployment mechanism. And then CEDAR's become the no noise algorithm in the process.

"And Riedel's MicroNs have become the de-embedder, embedder and Multiview facilities for the TDs and audio, and some of the control room elements. The combination of all that equipment is how we've got there."

### **With COVID-safe remote production, how is the audio side of Skype/Zoom handled?**

"Sky's already been using Skype, as the primary home viewer interaction for quite a few years in a very small capacity. When COVID hit that really changed the typology of how television was to be done. We can no longer have guests in studios. We can still have our hosts, but it was literally one host. In Skype world, we use a four-channel box, a single rack unit box that gives us our video and audio as an HD-SDI feed that we de-embed.

"The way we treat it, our TDs call it a two-device transaction. They might have a computer, an iPad or a phone to do the Skype or the Zoom component. And then we will always ask them to have a secondary phone, or secondary device that they can then dial into our mix-minus to shorten the latency trip of these calls."

### **We've recently had Queensland, New Zealand, and US elections. How did that impact roll-out?**

"Well, the workload obviously increased so the hours increased in having to deliver. Because we only have that four-hour window at night to cut over systems, it was a lot of checking in the early afternoons to the evening of the facility that we were going to cut over. And then that night we'd have that small window to cut over, re-check that the new system all functioned at is was meant to, and then hand over the controls to the operator.

"But, to bring all that together there were four core people from the technical team, so myself, we had one wireman, one engineer, and a project manager that was actually quite hands on with the whole process. And then outside of the engineering team we had our Mosart automation team. Because as we cut a facility over all the automation side had to also change to control these new systems. There was a lot of pre-testing that was ramped up. And then each night it was the cut over process. There's a lot of people walking around with very tired eyes for a good month to make that happen.

"Nothing out of the ordinary insofar as what had to be done. It was just the luxury of being able to run the two systems in parallel, and then when we were really happy with the new system we'd cut it over."

### **What's the next step?**

The company's got a couple of steps audio-wise over the next couple of years. Our current telephone system is the old school POTS PABX. The company's switching to a SIP-based platform so we're going to be using Teams in the future. All our remote bureaus, all their IFBs are currently dialled in by the telephone system. We're going to keep a telephone system and put it in SIP. But we're going to use Tieline codecs to connect all our studio's infrastructure for IFBs and foldback. There's a major project in that itself. Also replacing all the microphones and pre-amps around the country so that we end up with a standardised sound out of all our core facilities. Also, giving us remote-control of those facilities which hasn't been the case in the past.



**The Sky News arsenal of LAWO MC2 Micro Cores.**

"We were very lucky that all the equipment was ordered just before the beginning of this year, calendar year, which meant that the gear landed during COVID time. And because a lot of our production arm ended up operating from home as an engineering team we could actually come in and work in the facility while COVID was around. That gave us the ability to push on with the project and complete the project while the world was in lockdown. All that time I'd be home and work and that was pretty much it. But the fantastic thing about this new system is that now the system can be accessed anywhere in the world. I can literally be in any part of the country at any of our facilities and with a computer VPN into the company and control every single part of the audio process flow now, from the microphone all the way through to the transmission.

"We did have discussions on the modern world, and AES67, and SMPTE 2110, and all these new workflows that people are working with. Sky doesn't need that headache. They needed a simple, straightforward backbone system that was flexible, easy to control and manipulate, didn't require an IT department, and a million dollars of switches and technology to make it happen. If you think about the two studios and four control rooms and the whole platform that was being built, which was literally done on the budget of replacing one console, it's been quite an incredible feat."





## Blackmagic Announces New Fairlight Desktop Console, HDMI Monitor Interface

**BLACKMAGIC DESIGN** has announced the new Fairlight Desktop Console, a portable audio control surface featuring 12 touch-sensitive flying faders, built-in LCDs above each channel strip for pan and effects control, and full automation control. The Fairlight Desktop Console also features an HDMI interface for connecting a monitor to view an expanded graphical interface with audio status and metering. The Fairlight Desktop Console is an audio mixing control surface for mixing multiple tracks at once, automating a variety of parameters and plug-in settings, controlling channel functions, recording, monitoring, and navigating a project. Users get a familiar mixer design with 12 motorized faders, precision control knobs and illuminated buttons for quickly identifying channels. Customers can use the knobs and buttons to control channel parameters, EQ, dynamics, plug-ins and more. The built-in HDMI output lets customers connect a display, giving customers the same interactive graphical feedback as larger consoles.

The Fairlight Desktop Console uses the same high-quality faders as the full-size modular studio consoles. The precision engineered encoder knobs ensure a long life of noiseless operation, and the console buttons are rated at a million presses. Individual LCDs display track information for each channel. The high-quality search dial is extremely responsive and faster than a mouse. The console can be installed flush in a custom desk and comes with built-in power supply.

The Fairlight Desktop Console features 12 channel strips, each with a motorised fader for adjusting levels, a series of buttons for solo, mute and other parameters, a multifunction pan knob, and an LCD that shows customers information about the channel or track on which customers are working. Channel strips can be used to control an individual track and any strip can be assigned to any track in the project. Operators can also use a single strip to control multiple tracks in a group, or to control buses.

The Fairlight Desktop Console also includes transport buttons and a jog shuttle wheel. Users are able to quickly move around the timeline and navigate clips, scrub, start or stop playback, or jump to a new position quickly. The controls are logically grouped, allowing customers to keep their hand in one position while navigating the timeline from end to end, or anywhere in between, in seconds. The search dial can also be used for timeline zooming, clip levels and more.

Control function selector buttons let users assign buttons and knobs on the panel for different purposes. Operators can select between master and channel controls, panning, plug-in control, EQ, dynamics, and more. By default, the console works in strip mode, giving



customers one channel strip per track. Focus mode lets customers assign all of the select buttons and knobs on the console to work on the parameters or plug-ins for a single track. That means users can adjust the EQ, dynamics or any other plug-in parameter for a track using all of the select buttons and knobs on the console.

Fairlight's automation can record parameter changes made over time. For example, fader adjustments are saved and can be edited later. Fairlight lets customers automate anything from simple level changes to complex plug-in, EQ and dynamics changes.

The faders and knobs are touch sensitive, activating the moment users touch them, so they don't have to move them for the console to know the user wants to work on that parameter. Six automation buttons enable and disable automation, set recording method, and which automation curves show in the timeline tracks.

The monitoring controls on the Fairlight Desktop Console let users switch between sources, control both their studio and booth levels, or even control talkback if there is a Fairlight Audio Interface installed on the user's computer. Users also get a level knob along with buttons for dimming and muting their speakers, allowing them to cut or reduce the sound to allow conversations in the studio.

For visual feedback users can add an HDMI display to the Fairlight Desktop Console. This enables an extensive graphical display of everything happening on the console without users having to open pop-up windows on top of their timeline.

Blackmagic has also announced the new Fairlight HDMI Monitor Interface that lets customers use any HDMI or SDI television or computer monitor with the large Fairlight studio consoles.

The Fairlight HDMI Monitor Interface lets customers use their own HDMI monitor with Fairlight 2, 3, 4, or 5 bay studio consoles for direct visual feedback. It works by converting the console's ethernet data into HDMI and SDI, making it compatible with virtually any computer display or broadcast monitor.

Visit [www.blackmagicdesign.com](http://www.blackmagicdesign.com)

## Audionamix Combines Audio Source Separation with Enterprise Licensing

**AUDIONAMIX IS THE DEVELOPER** of audio source separation technology. Built on advanced signal processing and artificial intelligence, Audionamix technology extracts specific elements from an audio file, including speech, vocals, drums, and bass.

Audionamix has now taken its AI audio separation algorithms to the next level in the professional space with Enterprise Licensing. Streaming re-releases, international dubs, live film concerts, and immersive up-mixes transform classic content into new revenue. Valuable catalogue assets are often locked in their original state, so these revenue creating projects aren't possible without the availability of separate stems or a full session. Audionamix separation technology removes these audio challenges by separating dialogue and music elements from a master file, unlocking these assets for revenue-generating repurposing.

The Enterprise Licensing solution gives studios, distributors, publishers, and record labels the freedom and flexibility to access these solutions on their own schedules, and from their own facilities. Enterprise Licensing offers on-demand separation processing and integrates best-in-the-business technology through three secure options: a local on-site server, connection to online asset management systems, or through a web-based interface.

Clients receive unlimited access to Audionamix Professional Services' exclusive algorithms, including Dialogue Isolation/Removal, Music Removal, and the newest service, Music Stemming. With this new Music Stemming service, record labels, distributors, and publishers can separate a mastered track into four separate stems: vocals, drums, bass, and remaining music.

A vital component of the Enterprise Licensing solution is the customisable security it offers. To avoid security breaches, where personal employee data, emails, scripts, and even contracts, can be leaked, it is increasingly evident that securing assets has become paramount. The Enterprise Licensing solution adapts to the client's security protocols to make it a suitable solution internally or externally.

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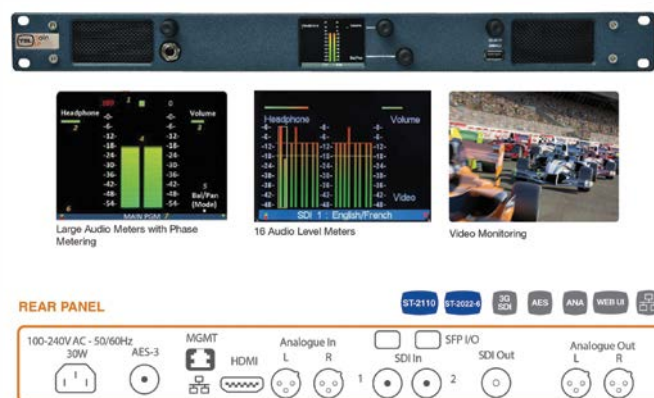
## TSL MPA1 Audio Monitoring Range

**AS THE LATEST ADDITION** to TSL Products' range of entry-level MPA1 audio monitors, the new MPA1-SOLO-IP helps to make the transition to IP seamless. The MPA1-SOLO-IP offers the same features as TSL's MPA1-SOLO-SDI, with 'scroll to hear' functions that allow operators to quickly monitor 16 audio channels, as well as the ability to view video sources but with the added benefit of monitoring across redundant SDI and IP networks for future-proofed confidence without compromise.

As productions grow more complex and the transition to IP expands beyond greenfield sites, facilities often require audio monitoring across multiple feeds and infrastructures. The new MPA1-SOLO-IP can host two Embriox SFP modules for IP connectivity for cost-effective redundant ST-2022-6 and ST-2110 audio and video monitoring. Borrowing design concepts from its MPA1-SOLO-SDI, TSL's MPA1-SOLO-IP also supports SDI, AES and analogue audio source monitoring via BNC or fiber via SFP+ port connection, whilst retaining the depth of 100mm for a compact and lightweight deployment, which is found on all MPA1 audio monitors.

TSL's MPA1 units are commonly used across studio control rooms and within OB trucks and fly packs to monitor audio mixer outputs and technical monitoring of the feeds.

As with all MPA1 monitors, the MPA1-SOLO-IP features SNMP connectivity with additional integration to control systems via Ember+ and NMOS. This allows engineers to set pre-sets and operators to recall MPA1



states as part of a system salvo, thereby minimising risk and complexity. The range also offers a built-in web server, offering operators the ability to manage channel names and system parameters remotely over an Ethernet network, view audio levels, and signal status and format via a user-friendly web GUI (graphics user interface).

Visit <https://www.tslproducts.com>

## Dante Bridge for Network Interconnection

**AUDIO PROFESSIONALS** have adopted the Dante Audio-over-Ethernet (AoE) protocol as a "go to" method of interconnecting devices using standard Ethernet networks. Dante's audio quality, flexible features, and simple deployment has encouraged broad adoption among equipment manufacturers. Despite these strengths, interoperability between networks can prove challenging. Studio Technologies, manufacturer of audio, video, and fiber-optic solutions, has announced a simple, yet high performance solution with the Model 5482 Dante Bridge. The unit provides a means of "bridging" up to 64 AoE channels between LANs or Dante domains.

Each of the Model 5482's independent interfaces provide three Gigabit Ethernet network ports, allowing support for both switched and redundant Dante operation along with a separate management network connection. Each "side" of a Model 5482 can be independently configured to match the unique demands of an application. The unit allows up to 64 audio channels to pass in each direction with support for up to 24 bits at 44.1, 48, and 96 kHz sampling rates. Sample-rate-conversion (SRC) capability, implemented in high-speed programmable logic, ensures that audio signals with different sampling rates and timing references can be directly interconnected.



The Model 5482 is compliant with the AES67 standard and supports the Dante Domain Manager (DDM) software application. Each of the unit's Dante interfaces can function independently — for example one of the network interfaces can be operated through DDM while the other remains "open." Each interface can be configured to support AES67 digital audio signals, allowing the Model 5482 to serve as a unique Dante-to-AES67 bridge.

The 1RU unit's front panel features a user-friendly interface with LED indicator lights, a graphics display, and push-button switches to observe and configure key operating parameters. Operating power can be provided by 100-240 volts, 50/60 Hz, or a source of 10-18 volts DC. If both AC and DC power are connected, then the Model 5482 will be powered by the AC mains source with DC serving as a "hot" standby.

Visit [www.studio-tech.com](http://www.studio-tech.com)

## USB Microphone

**DESIGNED FOR** vlogging, podcasting, voiceovers, or general home studio use, the new PreSonus Revelator USB microphone comes with presets, easy-to-use loopback audio, and selectable polar patterns.

According to PreSonus, the secret to a "radio sound" is a combination of the right talent and microphone with just the right amount of EQ and compression. Revelator makes it happen with the same EQ and compression algorithms found in PreSonus' StudioLive Series III mixers. Eight easy-to-use, professionally crafted presets give you that "radio sound" at the press of a button, with the right combination of EQ and compression to make your voice stand out. Eight additional user presets are provided to make a Revelator sound that's all your own using the full StudioLive Fat Channel controls available in Universal Control. You also get

a wealth of voice effects to create just about any crazy sci-fi sound you want. Even better, you can store up to four presets to be instantly selectable via the Preset button on Revelator.

Revelator also features two stereo streams for loopback audio so you can quickly and easily conference in Zoom calls, record gameplay, or showcase the audio in a YouTube video while adding witty commentary. Two streams for loopback audio mean you can mix and record the audio from two different applications on your computer, along with your voice, at the same time using the intuitive interface in Universal Control. Built-in monitoring and an onboard headphone amplifier let you listen to your performance and your mix in real-time.

Three pickup patterns provide maximum flexibility. Use the cardioid pattern for voiceovers or

performances where only one voice should be captured. Doing a podcast interview in person? Change to the figure 8 pattern and position Revelator between you so one side will pick up the interviewer and the other will pick up the guest. Doing a roundtable discussion or recording multiple instruments? Switch to the omnidirectional pattern to pick up sound all the way around the microphone.

With its bus-powered, USB-C compatible design, Revelator connects to Windows or macOS computers and Android or iOS tablets, and it comes with PreSonus' Studio One Artist recording and production software and Studio Magic Software Suite. An integrated desktop stand with built-in cable management and elegant aesthetic keeps your broadcast space clean.

Visit [www.presonus.com/products/Revelator](http://www.presonus.com/products/Revelator)





## NOVA Embarks on Network-Wide Upgrade with GatesAir

**THE LIFECYCLE** of a broadcast transmitter is affected by numerous variables that often correlate with climate, efficiency and maintenance. Over that lifecycle, manufacturers introduce a series of typically small, and occasionally large innovations, that bring new operational benefits to the broadcaster.

Considering these factors, a 15-to-20-year lifecycle is typically an ideal measuring stick for comparing new innovations against the current transmitter's performance. This was the case with NOVA Entertainment, a nine-station radio network with six transmission sites serving the Adelaide, Brisbane, Melbourne, Perth, Sydney, and Gosford communities.

The NOVA Entertainment network was launched in 2001 when Nova 96.9 in Sydney hit the airwaves, with the other sites soon following suit. That put the original transmitters at the 18-year mark when NOVA Entertainment engineers decided the time had come to upgrade.

"The primary driver was to replace aging and increasingly risky equipment," said Matt Steadman, Chief Technology Officer, NOVA Entertainment. "There was nothing necessarily wrong with the previous system. The transmitters were simply nearing end of life."

That said, the innovations in transmitter technology, particularly in terms of solid-state efficiency, maintenance and performance, took a great leap forward over 18 years. For Steadman, that not only meant reliability, less labor and excellent audio quality – it meant integrated control systems, native IP network monitoring, and advanced SNMP capability.

"We knew we wanted to continue with solid-state transmitters, particularly since we had one of the very early generations of reliable solid-state models," said Steadman. "What we did want different was a vendor with a more local presence that could provide a turnkey service across installation and commissioning. That pointed us to GatesAir, which has an in-country partner in RaeAir that could handle these and other important jobs along the way."

### FIRST TO THE PLATE

NOVA Entertainment earmarked Melbourne as the first site to upgrade. According to Steadman, RaeAir managed all acceptance, delivery, installation, testing and commissioning of the transmission systems. The logistics were further challenged by a move to a new tower site, which Steadman said was mostly about more affordable site rental fees.

"Our old transmitters remained in operation at the previous tower as we prepared the new site," said Steadman. "The tower relocation was the main reason we decided to upgrade the Melbourne systems first."

Moving to a new tower also meant building out the infrastructure for a new shelter. Steadman claims they walked into "an empty room with a flat floor, and put in everything from there." They



Nova Entertainment's Melbourne team, [L-R] Matt Steadman, Chief Technology Officer; Mark Jong, Technology Engineer and Mitchell Couchman, Technology Manager.



Nova's new GatesAir Flexiva FAX air-cooled transmitters.

first brought in a local electrical contractor who installed a three-phase electrical switchboard and sub-board systems that connects into the site generator and emergency power units. The RaeAir team soon came on site to prepare for installation of the transmitters and combiners, while the site owner, BAI Communications, installed the remaining RF systems including plumbing, transmission line and switches.

"The site had a very comprehensive grounding systems in place, with available points to disconnect the grounding for the entire building," said Alastair Reynolds, Broadcast Manager, RaeAir. "The concrete floors are about 18-inches deep, so we utilized heat-seeking penetrations and dropped heavy-lifting cables throughout there for the transmitters, all connected to the main grounding bars."

As is typical in Australia, NOVA Entertainment is not only leasing the new tower – from BAI in this case – they also share space with several other radio stations. That meant nearly five months of advance work for bringing the RF elements together.

"Every radio station in the building is combined into the same antenna," said Steadman. "There is a lot of physical work related to combining the network and laying the copper rigid transmission line. Each station has to be plumbed in and powered up, and then the audio input equipment is mixed in. This is all before we moved onto the transmitters."

GatesAir supplies the RF switches and plumbing via third parties, while BAI provided the filters and combining equipment, all of which were manufactured by RFS. "Installing these systems were like putting together a furniture kit," said Reynolds. "It was a matter of just installing the rigid line feed to the combiner, and tapping into the RF switching frames."

### SIMPLE AND ROBUST

The transmitter installations were achieved in a much briefer timeframe – a matter of days versus months. Four GatesAir Flexiva FAX air-cooled transmitters were delivered on a flatbed truck. According to Reynolds, the transmitters were shipped lying down versus standing vertically to ensure forklift access into the RF shelter. The RaeAir team then drilled dynabolts into the floor to secure the transmitters into position.

"It was a very simple process as GatesAir shipped everything with the ideal preparation," said Reynolds. "Everything is modular, so we were able to quickly do the basic hookups of PA modules and power supplies, and connect the RF plumbing to the racks. It was one of the quickest transmitter installations I have done. We installed all four transmitters and two switchbacks in about four days."

The modularity of the transmitters has a long-term benefit from a maintenance perspective, which RaeAir will handle moving forward. That includes the ability to hot-swap modules and

continues p42>>



## Lawo R3LAY v4.2 Software Ready for Virtual Machines

**WITH VIRTUALISATION** a hot topic for broadcasters, Lawo has rolled out a new version of its R3LAY virtual radio software suite that is optimised to run in Virtual Machines.

New R3LAY v4.2 software runs on standard Windows-based PCs and laptops, either stand-alone or as part of a RAVENNA / AES67 network, but can also be deployed within Virtual Machines hosted on cloud-based servers, thanks to numerous behind-the-scenes optimisations and performance upgrades that help R3LAY programs run even smoother and more efficiently.

"Radio engineers are ready for virtualisation," says Johan Boqvist, Senior Product Manager, Radio. "Phone caller management, software codecs, streaming apps and, importantly, playout systems are all available in software now. R3LAY represents the last piece of the puzzle – virtual mixing and routing software that can tie together that other software in one neat package. The result is the ability to originate, mix, route and distribute broadcast audio within a Virtual Machine environment. R3LAY 4.2 is a great tool for broadcasters looking to build bridges between the cloud and bare-metal computing equipment."

"Lawo is as enthusiastic about virtualising radio production as broadcasters are," says Lawo Radio Marketing Specialist Clark Novak. "We've always said virtualisation is the future, and with R3LAY v4.2, that future is here!"

R3LAY VRX, the Windows-native virtual mixer software with touchscreen-control capability has been deployed around the world at radio

stations, used to power news workstations, production rooms, and even on-air studios. With the addition of a companion Lawo OnAir 4 audio interface, R3LAY VRX is also suitable for remote broadcasts and home studio use.

The R3LAY virtual radio software family includes four apps:

- R3LAY VRX, a touchscreen-enabled Virtual Radio Mixer available in a four-fader, 12-input version (VRX4), and an eight-fader, 24-input version (VRX8) with advanced features such as Lawo AutoMix, Autogain, and the ability to host VST plugins.
- R3LAY VPB, a Virtual Patch Bay application that can mix and route traditional audio sources, audio from PC apps, and even RAVENNA / AES67 streams, as well as machine-logic commands.
- R3LAY AoIP Stream Monitor, an inspection and monitoring tool for AES67 networks, with configurable audio presence monitoring, loudness metering, signal quality analysis and SDP inspection for up to 16 critical AES67 streams.
- R3LAY VSC Virtual Sound Card, an 8x8 RAVENNA/AES67 sound card replacement for Windows PCs.



All R3LAY software runs on PC's with standard Windows versions, and in VMWare Server 6.6 virtual machine environments. R3LAY users can download the v4.2 software upgrade directly from the Lawo Downloadcenter at [www.lawo.com](http://www.lawo.com). For more information about R3LAY, or to download free R3LAY demonstration software, visit [www.lawo.com/r3lay/](http://www.lawo.com/r3lay/)

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&gt;&gt; from p40

power supplies while the transmitters are on air, without losing noticeable power; Reynolds confirms that where GatesAir's biggest competitors will typically lose at least 25% power with a PA module loss due to their combiner designs, the FAX remains at very near full power even with two module losses.

He also stresses the benefits of using common spare parts across all four transmitters, a benefit of GatesAir's architectural designs.

"The robust and redundant design of the FAX means that we will never have to take the transmitter off the air," said Reynolds. "If we have a failed module, we can simply open the door, slide out the old one out and slide in the replacement. GatesAir has standardized their parts across most of their transmitter models and power levels. All of this vastly reduces the amount of maintenance we have to do, and the architecture within the power supply design and the combining networks means less downtime."

The simplicity of the transmitters was one appealing aspect for Steadman upon his evaluation, and he attributes part of that to GatesAir's air-cooled designs.

"We inherited a VHF TV cooling system from the tower operator that steered us toward the air-cooled option versus liquid-cooled," said Steadman. "All we had to do was confirm that our additional heat load wouldn't exasperate the cooling system. The efficiency of the FAX is essentially the same as the liquid-cooled option, which is rare, and we don't have to manage the complexity of antifreeze, pump modules and other liquid-cooling elements."

**Nova's  
towering  
new  
transmitter  
location.**



The high-efficiency also will lead to cost-savings over the life of the transmitters, according to Steadman. "We haven't received our first power bill, but we know that the higher efficiency of the transistors at the core of the transmitters will reduce our power usage and result in lower bills."

#### BRIGHT AND DYNAMIC

Reynolds reports a smooth process for bringing the transmitter to air, with a brief commissioning process. Naturally, as is typical, there were some minor kinks to work out.

"There was a slight issue with the interlock signals in the switching frame, which was just a matter of sorting out some of the wires," he said. "We soon had the correct interlock signals coming into the

transmitter and the transmission controller. From there, we tested the dummy loads and brought the transmitters up at low power. We then switched off the other transmission service down the road, and gradually increasing the power while monitoring the reflected power and performance. We had everything at full power within 60 seconds."

Speaking of performance, Steadman reports that there has been a very noticeable improvement in audio quality. He attributes much of this to the GatesAir FAX exciter, which he claims as more accurate in terms of stability and superior audio transparency.

"We also moved the complete linear audio paths at the new site, which creates a double-barrel improvement," he said. "We have uncompressed links and brand-new digital exciters at the same time. We are no longer converting from Telco links, and we have plenty of bandwidth now using private IP links."

The uncompressed AES3 audio comes into the exciter via Lawo audio routers, which receives the

streams over an incoming Audio over IP feed. The Lawo audio routers are an interesting add-on, as they allow engineers to manage and select which audio is fed to which transmitter.

"We learned that little trick from our DAB+ systems," said Steadman. "It really simplifies how we manage backup audio sources. You can take any of the inputs out of the priority matrix, and reconfigure which feed has priority over the next. And it can all be controlled with a visual interface, but once running, it can make decisions on its own. It's quite autonomous, but also quite flexible."

Monitoring is also simplified with the FAX transmitters. Steadman said the previous system relied on relays and opto-isolators to communicate with the transmitters, and it required an outboard telemetry or remote-control system for management. The new remote-control system sits between two transmitters, with one interface to manage everything.

"It's an HTML-based webpage that can be managed from anywhere," said Steadman, as opposed to using an outdated Flash interface. "And we can still use our existing PTRG SNMP telemetry system. We can just plug the FAX transmitters straight in, and all of our red lights, green lights and power levels are instantly mapped. It's a huge step forward, because it's one internet cable versus multiple connectors plugging into different telemetry systems."

Moving forward, both Steadman and Reynolds are anticipating upgrades that will allow them to further streamline the distribution and transmission architecture. This includes adding enhanced and embedded services within core equipment that will eliminate some external, purpose-built components.

"We're always looking for new ways to reduce links in the chain," said Reynolds. "By removing extraneous components, we are reducing the points of failure. It also makes for a tidier installation overall."

Visit [www.gatesair.com](http://www.gatesair.com) and <http://www.raeair.com.au>

## Addressable Digital Audio Ads Come of Age at SCA

**ADDRESSABLE DIGITAL AUDIO** advertising has come of age, according to SCA, with the launch of two new, innovative digital audio campaign attribution products. The company says, as digital listening continues to record double digit growth, it's never been more important to provide SCA's advertisers with proof that this new advertising platform will really move the needle.

SCA Footsteps measures footfall attribution to digital audio campaigns, and SCA Soundcheck provides campaign and brand effectiveness studies specifically for digital audio. Now, both new products will be offered to advertisers after successful trials.

The two products will capitalise on SCA's 46% jump in listening hours on digital audio platforms in August, proving audiences are listening longer and more often.

SCA Footsteps is designed to provide advertisers with rich insights from listeners who have heard an audio ad and then gone to a specific location, retailer or precinct as a result within a measured timeframe. When a listener is exposed to a digital audio ad across SCA live radio streaming or SoundCloud, location data on their smartphones is

matched with tech provider Hyp to identify store or location visits across Australia to quantify the power of digital audio.

SCA Footsteps was recently trialed with a leading Australian automotive group using digital audio to drive in-store traffic prior to Father's Day, resulting in 61% uplift in visitation compared to a control group that had not heard the audio ad.

SCA says Footsteps enables advertisers to track how their audience is reacting to audio campaigns with tangible metrics, enabling measurement of campaign ROI.

Meanwhile, SCA Soundcheck which is housed within SCA's research and insights division SCA iQ, uses ad tracking and retargeting technology to specifically identify listeners who heard an ad and retargets them with a campaign study questionnaire, allowing comparison to a control group of internet users who have not heard the ad. This control versus exposed research methodology provides comprehensive results to inform advertisers of overall campaign effectiveness including increased consideration, ad recall and purchase intent.

The two new products can also be used in

conjunction with SCA Fanbase, a data-driven audience targeting product for digital audio campaigns that uses first-party data collected through SCA's apps and websites to create specific audience segments as well as third party providers.

"Australian audiences are listening to digital audio more than ever before, spending an average of three and a half hours listening a day. We believe that audio has the power to influence consumer purchasing behaviour like no other medium, with 41% of shoppers more likely to purchase advertised brands," SCA National Head of Radio Sales, Nikki Rooke, said. "It is the personalised, one-on-one, intimate nature of the digital audio experience for listeners that makes it so powerful. Our launch of SCA Footsteps and SCA Soundcheck now bring the ability to accurately measure campaign effectiveness in real time, also helping to determine strategies for future campaigns."

The two new products further enhance SCA's suite of digital ad products including ShakeMe, InStream, SoundCloud and Dynamic Audio Creative.

Visit <https://www.southerncrossaustereo.com.au>



## MediaHub Australia's FibreHub Strengthens Network Ops with DataMiner

**SKYLINE COMMUNICATIONS**, the supplier of AI-powered, end-to-end, multi-vendor network management and orchestration software solutions for the broadband & media industry, has announced a new deployment for MediaHub Australia, the broadcast playout services provider based in Ingleburn, New South Wales. The goal of this project was to provide MediaHub Australia with a solution that allows complete monitoring and control of their "FibreHub" optical network infrastructure from a single pane of glass.

Skyline's DataMiner solution at MediaHub now enables them to benefit from a rich graphical visual overview that shows the real-time health status of their vast network in a simple, efficient, and scalable manner. However, this isn't the first time MediaHub has turned to Skyline. A few years ago, Skyline also completed the DDA (Digital Distribution Australia) project, which involved the integration of DDA's broadcast transmitter sites, backbone network links, as well as critical backhaul for the New South Wales Government Radio Network. All this critical communication infrastructure was monitored in DataMiner from a single pane of glass (a "Manager of Managers"), cutting across all vendor and technology domains within that operation. That project was what made MediaHub fully realise all the advantages DataMiner has to offer.

"We recognised our operations could further benefit from the use of DataMiner," commented Scott Jolly, MediaHub Executive Head of Operations. "It was clear that with Skyline we could also extend and enhance the monitoring of our "FibreHub" optical network, which we recently expanded. With such a large DWDM network, it is critical to have the capability to control and monitor it in an efficient way."

"Expanding the network is one thing, being able to stay on top of it is another," added Michael Kennedy, MediaHub MCR & NOC Manager. "We keep on adding new technologies and services every year, so we really needed a future-proof solution that can keep up, and that is where we could see the strength



of DataMiner." MediaHub's view is in line with that of the entire media and broadband industry. It is vital for any leading company to deliver high-quality services in order to keep their customers happy and, moreover, to keep up with ever-increasing demands. There is no longer room for any failures or errors in this fast-changing world.

"Skyline's unparalleled technical solution and strong local presence has enabled us to meet the challenges associated with this landmark project. Kudos to the team at MediaHub Australia and to the technical team at Skyline for the achievement. We are excited to continue the journey with MediaHub as the platform grows. And we are certain that our multi-vendor end-to-end DataMiner solution will keep on living up to their high standards," said Albert De Witt, Regional Account Manager for Australia and New Zealand at Skyline.

Visit [www.skyline.be](http://www.skyline.be)

## ABC Upgrades Emergency Services

**THE AUSTRALIAN BROADCASTING CORPORATION** has announced upgrades to its emergency services in preparation for this year's emergency summer season.

The ABC's Managing Director David Anderson has launched the broadcaster's new Emergency website <https://www.abc.net.au/emergency> which aggregates information from key national and state emergency services.

Mr Anderson said last summer's horrific bushfire season showed that Australians turned to the ABC in record numbers to stay informed and to keep safe.

"The ABC was named the nation's most trusted source of emergency information\* and as we move towards summer we have directed every available resource to our emergency services.

"We understand the advice that cyclones and floods may be greater risks than fires this summer and we have been working with emergency agencies to give Australians the best information possible."

Mr Anderson was speaking at a special broadcast from Batemans Bay on the NSW South Coast to mark the recommissioning of the region's ABC local radio transmission mast, which was burnt out on 31 December 2019.

The new mast at Mt Wandera, near Mogo, was switched on in recent days and provides stronger ABC Television and Radio coverage to the greater Batemans Bay region.

The ABC's emergency website allows users to search for nearby incidents; check on emergency events in other locations around the country; and connects the user with their nearest local ABC Radio station.

ABC Local Radio remains the single most important means of delivering emergency information and warnings to local communities, particularly as an emergency event is developing.

\* The ABC Bushfire Impact Research was conducted by Ruby Cha Cha between 17-27 March 2020. It involved a survey of 1630 people (aged 18-75 years).

## Quantum, Fetch TV and Adgile Media Target TV Ad Effectiveness

**AUSTRALIAN DATA SCIENCE** and artificial intelligence developer Quantum, OTT provider Fetch TV and Adgile Media have announced a partnership designed to allow consumer goods businesses to "close the loop" and measure the impact of their TV advertising on actual sales.

The solution, Q.Measure TV, delivers the type of reporting that advertisers have come to expect in the digital world – timely, accurate and immediately actionable.

Quantum's Executive for Media & Marketing, Global Markets, Lawrence Puang, said: "Existing solutions prove TV works. Q.Measure TV goes further in enabling advertisers to optimise their TV advertising strategies to maximise sales.

"This is a game changer in measurement and accountability for a sector that spends, on average, more than two-thirds of its advertising budget on TV.

"Never before have FMCG advertisers been able to see exactly who they reached at an anonymised level, to measure how those consumers have responded and then accurately optimise campaigns to drive customer acquisition and incremental sales for existing shoppers," Puang said.

Adgile Media creates proprietary, rich, structured data from live and on demand TV content to validate media schedules and fuel smart TV measurement and analytics. Fetch TV measures the viewing behaviour of 7% of Australian TV households, across nearly 3m hrs of viewing per day.

Advertisers will access performance data across a range of metrics delivered through the Q.Measure TV Interactive Portal. Key data points include conversion rates, precise demographic breakdowns on consumers reached and then converted and the advertising levers that can be pulled to drive acquisition and sales.

Q.Measure TV also enables advertisers to compare the success of their campaigns with others in their category enabling them to react in real-time to changes in category marketing dynamics.

Q.Measure TV will officially launch to the marketplace in Q2 FY21.

Visit <https://quantum.com>



## Maximising the most of broadcast ecosystems with MediaWAN

By Angus Stewart, Business Development Executive, ANZ, Telstra Broadcast Services

**WHILE 2020 HAS BEEN** a year of unprecedented upheaval, one thing that has come out of the global events is a new appreciation for the resilience of the broadcast industry. From swiftly adopting remote workflows in post, to scaling to meet demand, to accelerating remote production to produce content away from the actual event, the industry has shown itself to be astonishingly adaptable.

In many ways though we should not be surprised. The past two decades of broadcast media have probably seen more change in a short space of time than any other industry. We have moved from analogue to digital signals, from SD to HD and now on to 4K/Ultra HD, and from SDI being at the core of every workflow to a new IP-based studio infrastructure. And now change is about to accelerate once more as the industry moves wholesale from a video-centric model to an IP-centric one, and new ways of producing and delivering television content to a growing worldwide audience become possible.

MediaWAN, a brand-new service from Telstra Broadcast Services, is one of the enabling technologies that will help media companies make the most of the new broadcast ecosystem. In short, it delivers a single Australia-wide core network for IP Contribution, managing both data and video with premium SLAs.

This solution offers a reliable, high-bandwidth, high-performance and low latency IP media and data network with national reach. Built from best-of-breed components that are sourced as part of our established relationships with leading

global technology providers, as well as the strong support of local channels and partners. Real-time video, audio and enterprise data delivered between critical media hubs as IP data flows, with impressively granular control over connectivity. Even more, it offers end-to-end management and 24/7 support from a dedicated team of media industry professionals at Telstra Broadcast Services.

As a result, we believe that MediaWAN will provide an impressive range of benefits to broadcasters and other media companies across Australia.

To begin with, it allows for the consolidation of multiple networks that can be maintained by even a single production, never mind an entire media company, into one. This dramatically reduces complexity within a company and lowers the costs of dealing with network issues. What's more it achieves this by maintaining a broadcast-level SLA.

This is an important point. The loss or delay of data in many IP-based industries is typically only considered inconvenient and is treated as such. Our broadcast heritage ensures that the video signal is treated with as much care and attention to redundancy in its data form as it would be if it was still SDI.

Level 1 service assurance is also guaranteed by the fact that MediaWAN enables a single point of contact for broadcast customers. Many media company's network operations have accreted in an ad hoc manner over time, and unteasing these connections can be difficult, especially, for example, when there are issues involving live contribution and the clock is ticking. A single point of contact ensures that when



problems occur, they can be identified and fixed smoothly and swiftly and within quick response and restoration targets.

Cost savings are impressive too. Essentially by using MediaWAN media organisations have not only consolidated all their disparate network operations into a single supplier and point of contact, but they have consolidated the various internal teams that had to manage a wide brief between different companies. Again, this speaks to minimising complexity within an organisation; it effectively enables you to outsource many of the day-to-day tasks of maintenance, lifecycle management, third-party vendor management, monitoring, notification, and network restoration.

And finally, as many media companies have found the movement of data is commercially challenging. However, the consolidation of multiple networks into one can not only provide enhanced control over IP data flows, it can do it whilst maintaining a cost-effective price point.

The industry is changing fast. MediaWAN enables media companies to keep up with limited financial exposure, to scale swiftly when required, and also tap into decades of specialist knowledge in connecting companies all across Australia. It's country-wide connectivity for a whole new way of working.

Visit <http://www.telstra.com/broadcastservices>

## Video Quality "Dial" to Control Viewer Experience

**SSIMWAVE** recently launched a new product that enables video providers to achieve savings in delivery costs while delivering 'just right' levels of video quality across entire VOD asset libraries.

The SSIMPLUS Video Quality Dial is a software application that allows video providers total control over the Viewer Experience of any type of VOD video content, enabling optimisation of the bitrates of every encode and every title based on the company's advanced video quality metric, SSIMPLUS. Compatible with all cloud-based encoding systems, the new product can

enable bitrate reductions of up to 50 percent while allowing providers to deliver the Viewer Experience of choice to satisfy their viewers.

"Current content aware approaches do optimisation using the bitrate as a guideline, while keeping quality the same, even if that quality level is subpar or bad," said Dr. Abdul Rehman, CEO and co-founder of SSIMWAVE. "Our patented approach drives video encoding to deliver desired viewer experience at half the cost using your existing encoding infrastructure. Thus, you deliver the Just-right Quality: no more and no less."

Using the Video Quality Dial, providers pre-determine a desired Viewer Experience level, based on the 0-100 linear SSIMPLUS scale. The Video Quality Dial acts as a smart layer around the provider's existing cloud encoder, automatically choosing the lowest possible bitrate required to deliver the desired Viewer Score. By choosing the most optimised encode for the selected quality level, the SSIMWAVE product also addresses access network issues, driving reductions in re-buffering, start-up times, stalling and profile switching.

Visit <https://www.ssimwave.com>



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## Transport Stream Outage Detection

**DIGITAL NIRVANA** recently introduced a near frame level accurate Transport Stream Outage Detection capability for its advanced MonitorIQ 7.0 broadcast monitoring and compliance logging platform. The new feature enhances MonitorIQ's video outage detection by automatically inserting black frames into recorded video to indicate the exact instances in which a loss of signal has occurred.

Digital Nirvana's MonitorIQ allows operators to record, store, monitor, analyse, and repurpose content quickly and efficiently with a minimum of clicks. Natively recording content from any point in the video delivery chain, from production (SDI) to consumption (OTT), MonitorIQ enables broadcasters to collect and use knowledge about their content to meet a wide range of regulatory and compliance requirements.

The new Transport Stream Outage Detection feature gives MonitorIQ end users an accurate video record of any spot in the video delivery chain in which a loss of signal has occurred. Rather than relying on the recorded video to detect loss, as is done with competing solutions, MonitorIQ constantly monitors the physical input for any loss. Once the system detects a loss of transport stream input signal, an encoding process immediately starts inserting black frames into the recorded video. When Monitor IQ detects the return of good signal input, it stops the insertion of black frames into the video stream. This process allows MonitorIQ to report highly accurate outage durations and allows end users to view the actual outage in the browser-based user interface with a black slate inserted into the video.

Visit <https://digital-nirvana.com>

## Dolby Atmos for Wohler Monitoring

**WOHLER HAS ANNOUNCED** that Dolby Atmos is now available as part of its decoding and monitoring option for its flagship iAM-12G-SDI audio-video monitor. Wohler's iAM-12G-SDI is the only in-rack monitoring and

fibre options, pre-set enhancement, including import/export, and pre-fade or post-fade selection on both the XLR and DB25 output connectors.

The iAM-12G-SDI supports multiple signals: 12G/3G/HD/SD-SDI, options



metering device to integrate the Dolby Audio Professional Decoder, which will enable customers the ability to monitor in Dolby Atmos along with other traditional Dolby Audio technologies. Support may be enabled over the 12G-SDI inputs, the AES inputs and SFP inputs.

Enhanced functionality includes the ability to mix Dolby signals with other broadcast signals in customised pre-sets, a capability giving the iAM-12G-SDI a very rich feature set.

Other new features since launch that are available in the iAM-12G-SDI include loudness measurement, phase indication, support for 12G

for VoIP formats (SMPTE 2110, SMPTE 2022), as well as a growing range of additional I/O options via its small form-factor pluggable (SFP) interface. All iAM Series products use SFP cages to enable simple adaptation of interfaces and a wide selection of signal I/O. The addition of Dolby Atmos, Dolby E and Dolby D makes this unit a first in the marketplace.

Visit [www.wohler.com](http://www.wohler.com)

# TECHTEL

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## Multi-Channel NDI|HX 4K Decoder

**THE KILOVIEW MG300** is an embedded, high performance, NDI|HX 4K transcoder UHD multi-channel media gateway.

The MG300 integrates functions such as multi-channel video decoding between NDI|HX, SRT, RTMP, RTSP, TS-UDP, and HLS to SDI and HDMI. The MG300 also provides multi-view output and streaming, video image segmentation, protocol cross conversion, streaming media and distribution services. It excels at connecting videos from different systems, manufacturers, types and encoding. The MG300 also works as a streaming media server with the capability for up to 100 concurrent access points.

The MG300 also supports video/audio decoding of various media protocols, up to nine-channel 1080p picture synthesis, and picture/text overlay with a direct output as SDI or HDMI.

The Kiloview MG300 can be widely applied to RTSP LAN monitoring or other IP-camera video live broadcasts over public networks. This works especially well for monitoring sites such as scenic locations, stores, campuses, and farms.

It can also switch images for various on-site cameras with different angles, multi-party video collaboration, SIP video conference to live webcast, IP stream distribution forwarding/switching/live streaming, and streaming media decoding to display multi-channel split screen display.

Kiloview MG300 supports:

- NDI|HX, H.265, H.264 decoding, up to 16 channels 1080p30, or 4 channels 4K HD video simultaneous decoding output.



- HDMI and SDI dual interface output; HDMI up to 3840×2160@60Hz; and SDI up to 1920×1080@60Hz, same or different content output.
- IP Stream Function – nine channels of video stream dynamic switching output with smooth and seamless switching and custom 1/2/3/4/6/8/9 split display.
- Image enhancement and fault-tolerant technology for low code-encoded video, 10 percent of network packet loss video, etc., clear and distortion-free decoding output.
- Intelligent delay control technology to achieve a less than 200ms decoding delay in network environment.
- Conversion protocols – up to nine protocols at a time with streaming separated into SRT, RTMP, RTSP (Onvif can be customised).

Visit <http://en.kiloview.com>

## 3GSDI/HDMI to USB 3.0 Streaming Converter

**MARSHALL ELECTRONICS'**

VAC-23SHU3 USB 3.0 adapter enables any HDMI or 3G/HD-SDI video and audio source to be ingested into a computer for live streaming, video conference, collaboration, video production, and recording. The converters offer a plug-and-play setup that integrates professional video sources to the user's choice of PC-based soft codecs and applications.

Active HDMI/3G-SDI (BNC) loop-through outputs keep sources available for other purposes, such as feeding monitors, switchers, recorders, etc. UVC protocol support allows the application to control the video format, resolution, frame rates, and other settings independent of the original source format.

Visit <http://marshall-usa.com>

## Phabrix QxL 25G IP UHD ST 2110 Rasteriser

**PHABRIX HAS ANNOUNCED** that its QxL 25G IP rasteriser is now shipping.

The QxL inherits all the JT-NM-tested features of the Qx with a common look and feel across both platforms. Out of the box, this 10G/25G IP enabled rasteriser supports JT-NM TR 1001-1:2018, 2110-20 (video), 2110-30 (PCM audio), 2110-31 (AES transport), and 2110-40 (ANC media) flows all with 2022-7 Seamless IP Protection Switching (SIPS), and independent PTP slaves on both media ports for fully-redundant media network operation.

The toolset also provides support for DHCP on all IP ports, unicast DNS-SD, AMWA NMOS IS-04 Discovery and Registration, IS-05 Connection management, system resource, and Network Topology Discovery using Link Layer Discovery protocol (LLDP).

IP media interfaces are provided as standard and SDI media interfaces with optional SDI Eye and Jitter measurement are available as a factory fitted option. The flexible user-friendly GUI provides up to 16 user-configurable windows with pre-sets for rapid visualisation of different traffic and workflow configurations, and with the same accessible user interface as the Qx there are minimal re-training costs for existing Qx users. The complexities of ST 2110 and NMOS operation are also presented to the user in an intuitive and accessible manner.

A suite of operator level IP flow health and PTP monitoring features are provided with warnings and alarms. For detailed analysis and debug, the new IP-MEAS toolset provides advanced engineering-grade information including four 2022-7 Packet Interval Time (PIT) displays, media port network statistics, real time measurements of Flow to PTP relationships and latency plus real-time measures of 2110-21 Cinst and Vrx.

Visit <https://www.phabrix.com>

## Dalet AmberFin Transcodes in the Cloud

**DALET HAS ANNOUNCED** Dalet AmberFin Cloud Transcoder, a new SaaS-based, high-quality media processing service with robust media packaging and distribution capabilities for post-production and broadcast workflows. The solution includes every feature from the on-premises version of Dalet AmberFin, with tools beyond simple media conversions, ensuring media professionals have access to image scaling, standards conversions, cut/splice, caption conversion, audio normalisation, localisation versioning, IMF creation and submission, and HDR conversions.

Dalet AmberFin Cloud Transcoder can be accessed via a public cloud managed service environment, or deployed as a scalable container-based service inside a customer's existing private cloud infrastructure. The high-performance transcode service, which supports a wide range of formats, takes a factory-like approach to managing media conversion projects from small-scale post-production operations to larger media enterprises, with the highest degree of quality and economy.

Feature highlights include:

- SaaS Offering, controllable from the Dalet AmberFin Workflow Engine and via REST API.
- Elastic scaling in a managed service or within an existing VPC.
- Supports all industry standard codecs, plus HDR and Dolby Vision.
- API-first approach enables customers to use Dalet AmberFin on its own or inside a larger work order or MAM system, including Dalet Galaxy five or the Ooyala Flex Media Platform, now part of Dalet.
- Fully compatible with existing Dalet AmberFin transcode profiles.
- Easily balance transcode volume between on-premises and cloud, controlling both from the same workflow engine.
- Monthly tier-based subscription with cost per minute pricing.

Dalet AmberFin Cloud Transcoder is supported globally by Dalet's professional services and customer support teams who can assist with workflow development, including scripting and API integration within a wide range of media environments.

Visit <https://www.dalet.com>

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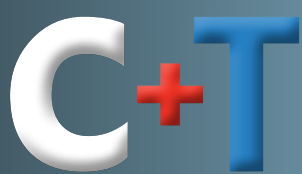
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## C+T AUSTRALIA/NEW ZEALAND FEATURES + DEADLINES 2021

ISSUE	EDITORIAL + AD DEADLINES		PUBLICATION DATE	PRODUCT ROUND-UP	SHOW COVERAGE
<b>February</b>	Editorial Submissions:	01-02-21	3rd Week February	+ Multi-screen Delivery	+ C+T CameraTech Awards + C+T Webinar (Sponsorships Available)
	Ad Bookings:	05-02-21		+ NDI Solutions	
	Ad Artwork:	08-02-21		+ Data Unification –Targeting, Privacy, Recommendation, Subs + Focus on Startups + Remote Production Tools	
<b>Mar-April</b>	Editorial Submissions:	23-03-21	1st Week March	+ Content Logistics and MAM	+ Show Preview: ABE April 27-29 + C+T SportsCasting Awards + C+T Webinar (Sponsorships Available)
	Ad Bookings:	27-03-21		+ Content Delivery	
	Ad Artwork:	30-03-21		+ Podcasting + Remote Production Tools	
<b>May-June</b>	Editorial Submissions:	15-05-21	4th Week May	+ Sports & Esports Production Solutions	+ Show Preview: BroadcastAsia/ConneCTechAsia June 09-11 + C+T NewsTech Awards + C+T Webinar (Sponsorships Available)
	Ad Bookings:	15-05-21		+ Drones & UAVs	
	Ad Artwork:	27-05-21		+ OTT/IPTV/VOD Solutions + Focus on Startups + Remote Production Tools	
<b>July-Aug</b>	Editorial Submissions:	22-06-21	1st Week July	+ 4K & IP Production & Delivery	+ Show Preview: METexpo Aug 18-20 + C+T Post Production Awards + C+T Webinar (Sponsorships Available)
	Ad Bookings:	23-06-21		+ Podcasting	
	Ad Artwork:	16-07-21		+ Content & Cyber Security + Remote Production Tools	
<b>Sept-Oct</b>	Editorial Submissions:	14-08-21	4th Week August	+ ENG/Newsroom Systems	+ Show Previews: IBC September 10-14 NAB October 9-13 + C+T MAM & Content Delivery Awards + C+T Webinar (Sponsorships Available)
	Ad Bookings:	17-08-21		+ Compression, Encoding	
	Ad Artwork:	25-08-21		+ Radio Technology + Focus on Startups + Remote Production Tools	
<b>Nov-Dec</b>	Editorial Submissions:	23-10-21	2nd Week November	+ NDI Solutions	+ C+T Audio & Radio Awards + C+T Webinar (Sponsorships Available)
	Ad Bookings:	26-10-21		+ Streaming	
	Ad Artwork:	02-11-21		+ Cable & Satellite Delivery + Data Unification + Remote Production Tools	

## C+T ASIA FEATURES + DEADLINES 2021

ISSUE	EDITORIAL + AD DEADLINES		PUBLICATION DATE	PRODUCT ROUND-UP	SHOW COVERAGE
<b>Mar-April</b>	Editorial Submissions:	27-01-21	3rd Week February	+ HDTV & Beyond	+ Pre-Show Briefing: ABU Digital Broadcast Symposium March 1-3, Kuala Lumpur
	Ad Bookings:	27-01-21		+ Broadband & HbbTV	
	Ad Artwork:	03-02-21		+ Multi-screen Delivery + NDI Solutions + Data Unification –Targeting, Privacy, Recommendation, Subscriptions + Remote Production Tools	
<b>May-June</b>	Editorial Submissions:	15-05-21	4th Week June	+ OTT/IPTV/VOD Solutions	+ Show Preview: BroadcastAsia/ConneCTechAsia June 09-11 + C+T ASIA Awards
	Ad Bookings:	15-05-21		+ Sports & Esports Production	
	Ad Artwork:	20-05-21		+ Podcasting + RemoteProductionTools	
<b>Aug-Sept</b>	Editorial Submissions:	24-07-21	1st Week August	+ Loudness Solutions	+ Pre-Show Briefing: IBC Amsterdam Sept 10-14
	Ad Bookings:	24-07-21		+ Cloud Solutions	
	Ad Artwork:	29-07-21		+ Content Security + Compression, Encoding, Transcoding Solutions + Remote Production Tools	
<b>Oct-Nov</b>	Editorial Submissions:	13-09-21	3rd Week October	+ Cable & Satellite Delivery	+ Pre-Show Briefing: AVIA (CASBAA) Asia Video Summit + Pre-Show Briefing: NAB Las Vegas Oct 9-13
	Ad Bookings:	13-09-21		+ Digital Asset Management Solutions	
	Ad Artwork:	20-09-21		+ OTT/IPTV/HbbTV Solutions + Remote Production Tools	

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